CRYPTO ASSETS

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FEBRUARY 21ST 2023

OECD International Academy for Tax Crime Investigation

Conducting Financial Investigations

OECD

Financial investigations?

IT'S ALL ABOUT THE MONEY!

CORRESPONDENT BANKING – FOLLOW THE MONEY

Hot news!

INTERNATIONAL CONSORTIUM of INVESTIGATIVE JOURNALISTS

Journalists from De Tijd, Knack and Le Soir were part of the journalists researching the documents. Belgium appeared 365 times in the 2,100 leaked documents. The four major Belgian banks, ING, KBC, Belfius and BNP Paribas Fortis, were featured. In one case, half a billion dollars was transferred in one go from a Belgian bank account to a letterbox company in the British Virgin Islands. ING Belgium in particular turned out to be a pivot in the suspicious cash flows through its correspondent banking services and former branch office in Geneva. The bank appeared to be involved in almost half of the reports in which Belgium occurs.

Belgium appeared 365 times in the 2,100 leaked documents.

17,38 %

CORRESPONDENT BANKING – FOLLOW THE MONEY

Basic Wire Transfer

Originator → Originating Bank → Intermediary Bank → Beneficiary Bank → Beneficiary

Basic Wire Transfer
Multiple Intermediar[ies]

FEDERAL
RESERVE
BANK
USA

KBC-bank Belgium in USD
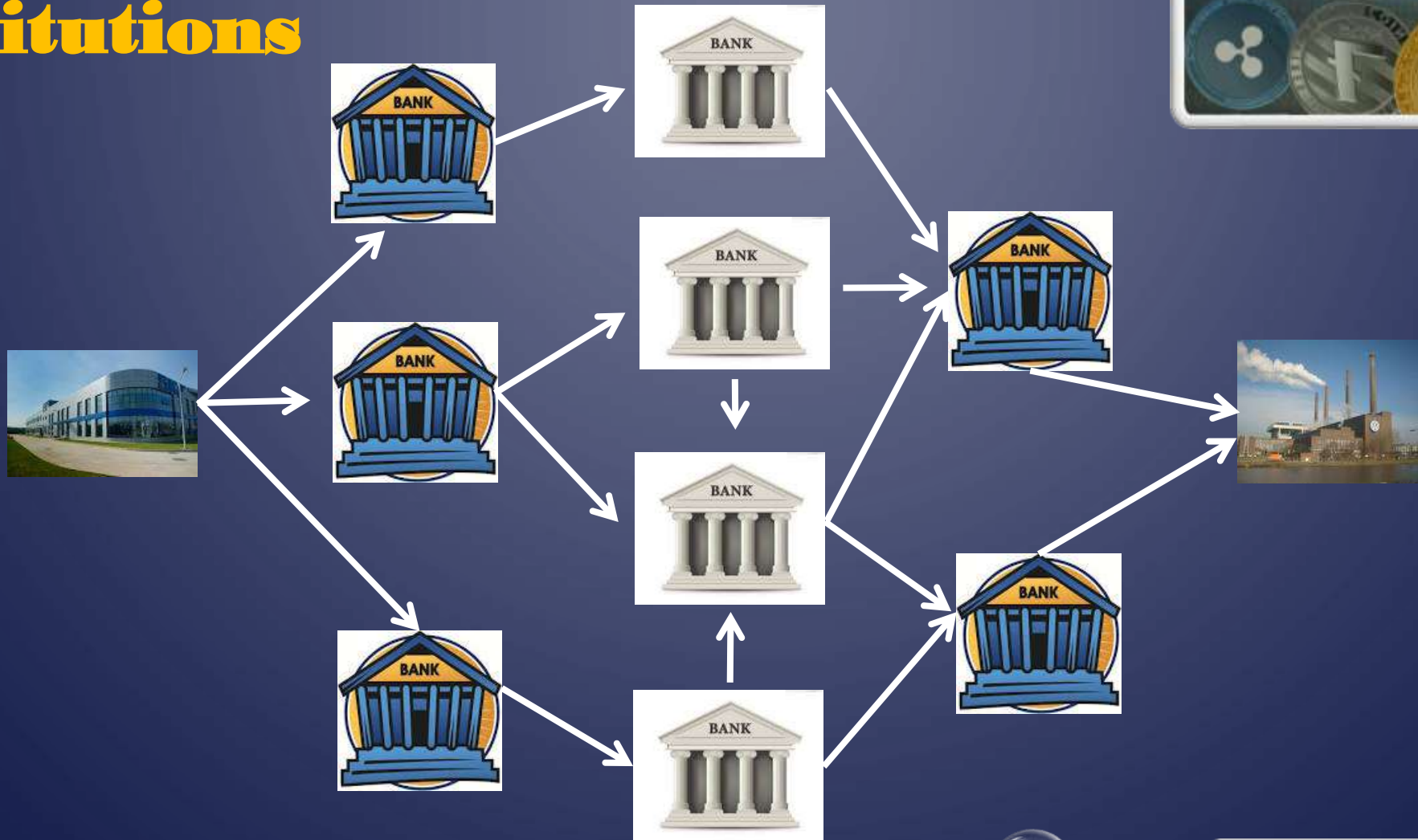
JP Morgan in the USA

City Bank in the USA

ING-bank Belgium in USD

CORRESPONDENT BANKING – FOLLOW THE MONEY

Multiple Institutions

CORRESPONDENT BANKING – FOLLOW THE MONEY

CORRESPONDENT BANKING – FOLLOW THE MONEY

TXN Date	Base Amount	Originator Name	Originator Account ID	Originator Address Street	Originator Address City	Originator Country Code	Originator's Bank Name	Beneficiary Name	Beneficiary Account ID	Beneficiary's Bank Name	Bank to Bank Instructions
RXN_EXCTN_D	TRXN_BASE_AM	SCND_ORIG_NM	SCND_ORIG	SCND_ORIG	SCND_ORIG	IG_ADDR_C	ORIG_NM	SCND_BENE	SCND_BENEF	BENEF_NM	BANK_TO_BANK
15-Jun-07	$29,973.02	Chester Chan	12345	Suite 4 Chen	BEIJING	CN	BANK OF CHINA	Bad Guy	74310753794	BANK INDONESIA	FOR LIVING COST
29-Oct-10	$100,950.00	Desert Heat	21296-00	PO Box 89	SANAA	YE	UNITED ARAB BANK	Bad Guy	1001565223	COOPERATIVE BANK	Consulting Fee
18-May-09	$10,000.00	Bad Guy	ad67898	7th Avenue,	LAGOS	NG	ECOBANK NIGERIA	NewCo Ltd	sdrea	JPMORGAN CHASE	Invoice 23423425
1-Sep-10	$69,001.94	Bad Guy	12345678	7th Avenue,	SHARJAH	AE	UNITED ARAB BANK	Bobs Boats	HY98036	UBS BANK	Electronic Goods
1-Oct-10	$100,950.00	Bad Guy	876543456	7th Avenue,	SHARJAH	AE	UNITED ARAB BANK	Bobs Boats	HY98036	UBS BANK	Trade Goods
30-Aug-10	$1,400,000.00	DW82902652543	Bad Guy	6 Maple Ave	CALGARY	CA	TD BANK	Bobs Boats	LB20005600	BANK AUDI S.A.L	Investments
30-Jan-13	$40,000.00	Muhammad Ali	678946	21 Safari Wa	KANO	NG	FIDELITY BANK	ABC Corp	053-05533	HSBC HONG KONG	B/O Jessie James

Hot news!

ICIJ **INTERNATIONAL CONSORTIUM** *of* **INVESTIGATIVE JOURNALISTS**

In one case, half a billion dollars was transferred in one go from a Belgian bank account to a letterbox company in the British Virgin Islands.

500,000,000.00 $

The FinCEN Files

BBC NEWS

CORRESPONDENT BANKING – FOLLOW THE MONEY

LAW ENFORCEMENT & BANK COLLABORATION

- WHO TO SERVE & WITH WHAT (MLATS; EGMONT; INTERPOL; SUBPOENAS)
  - WHO IN THE US? (FED, CHIPS)
- EACH BANK IS DIFFERENT
- BANK SAR FILING
- ASSET SEIZURE ORDERS

What...is a Cryptocurrency?

- Cryptocurrency (or Cryptoasset) are a type of **virtual currency** or alternative currency designed to work as a medium of exchange within certain communities.

- A **cryptocurrency** uses cryptography to **secure** transactions, **control** the creation of additional units, and verify the **transfer** of assets.

- Cryptocurrencies mainly use **decentralised** control
  - No single point of contact
  - No regulatory body

- The decentralised control of each cryptocurrency works through **distrubuted ledger technology**, typically a **blockchain**, that serves as a **public financial transaction database**.

What...is a Cryptocurrency?

- Over 2,100 available

- Different uses

- Different features

- Total market capitalisation and tranding volume is enormous

What...is a Cryptocurrency?

Currency	Average rate	Market value	Volume (24h)	Exchange (24h)
1 Bitcoin (BTC)	57 684.00 USD	1 078 951 984 661.00 USD	64 729 631 749.00 USD	2.94%
2 Ethereum (ETH)	3 525.00 USD	408 003 494 910.00 USD	42 368 534 705.00 USD	2.31%
3 Binance Coin (BNB)	626.75 USD	96 827 057 831.00 USD	4 013 399 730.00 USD	0.27%
4 Dogecoin (DOGE)	0.718 USD	93 220 563 499.00 USD	29 225 167 974.00 USD	23.10%
5 XRP (XRP)	1.58 USD	72 806 058 248.00 USD	8 321 702 066.00 USD	-0.42%
6 Tether (USDT)	1.00 USD	55 450 864 493.00 USD	182 912 164 309.00 USD	-0.32%
7 Cardano (ADA)	1.61 USD	51 565 994 689.00 USD	6 351 302 964.00 USD	-0.55%
8 Polkadot (DOT)	39.66 USD	39 257 905 350.00 USD	2 283 120 553.00 USD	-2.61%
9 Bitcoin Cash (BCH)	1 389.64 USD	26 008 475 094.00 USD	10 009 299 187.00 USD	-2.84%
10 Litecoin (LTC)	345.21 USD	23 066 628 639.00 USD	11 425 466 531.00 USD	-5.20%

May 8th 2021

Currency		Average rate	Market value	Volume (24h)	Exchange (24h)
1	Bitcoin (BTC)	38 671.00 USD	726 549 557 877.00 USD	37 241 464 083.00 USD	12.06%
2	Ethereum (ETH)	2 357.05 USD	275 736 528 174.00 USD	25 666 860 282.00 USD	8.59%
3	Tether (USDT)	0.998 USD	61 900 669 608.00 USD	67 403 062 082.00 USD	-0.32%
4	Binance Coin (BNB)	321.93 USD	49 779 620 980.00 USD	1 893 336 388.00 USD	6.65%
5	Cardano (ADA)	1.36 USD	43 726 078 185.00 USD	2 231 714 593.00 USD	10.98%
6	XRP (XRP)	0.666 USD	30 841 167 006.00 USD	2 582 507 492.00 USD	9.81%
7	Dogecoin (DOGE)	0.225 USD	29 497 819 560.00 USD	2 721 115 896.00 USD	13.11%
8	USD Coin (USDC)	0.999 USD	27 320 751 934.00 USD	2 508 060 030.00 USD	-0.23%
9	Polkadot (DOT)	14.95 USD	15 350 391 713.00 USD	1 014 294 013.00 USD	10.25%
10	Binance USD (BUSD)	1.00 USD	11 927 543 267.00 USD	5 272 610 805.00 USD	-0.05%

July 26th 2021

	Currency	Average rate	Market value	Volume (24h)	Exchange (24h)
1	Bitcoin (BTC)	22 266.00 USD	425 790 023 146.00 USD	38 432 875 463.00 USD	2.77%
2	Ethereum (ETH)	1 756.83 USD	211 667 213 123.00 USD	14 182 654 905.00 USD	-0.52%
3	Tether (USDT)	1.001 USD	67 773 326 603.00 USD	45 276 757 277.00 USD	0.00%
4	USD Coin (USDC)	1.001 USD	51 645 273 108.00 USD	6 140 515 029.00 USD	0.00%
5	BNB (BNB)	296.98 USD	48 490 339 857.00 USD	520 928 318.00 USD	0.42%
6	Binance USD (BUSD)	1.001 USD	20 055 601 549.00 USD	9 538 408 301.00 USD	0.01%
7	XRP (XRP)	0.357 USD	17 787 878 258.00 USD	864 497 817.00 USD	0.33%
8	Cardano (ADA)	0.513 USD	17 360 827 920.00 USD	649 087 214.00 USD	-0.74%
9	Solana (SOL)	36.22 USD	12 777 921 899.00 USD	995 675 337.00 USD	4.47%
10	Polkadot (DOT)	7.86 USD	9 038 443 208.00 USD	334 381 14...	

September 12th 2022

FATF Definition of Virtual currencies/Cryptocurrencies

Financial Action Task Force definition:

"Virtual currency is a digital representation of value that can be digitally traded and functions as:
(1) A medium of exchange; and/or
(2) A unit of account; and/or
(3) A store of value, bud does not have legal tender status (i.e., when tendered to a creditor, is a valid and legal offer of payment) in any jurisdiction. It is not issued nor guaranteed by any jurisdiction, and fulfils the above functions only by agreement within the communtity of users of the virtual currency"

Key Points:
- Decentralized – No central agency to approach for information on users
- Peer to Peer – controlled by the invested community
- Issued through providing resources to the network – This helps to verify transactions and provide security.
- Value is based on supply & demand, the economic policy or desire to invest in the technology on offer.

In its most recent updat to the guidance the FATF also defined some cryptocurrencies are "virtual assest" which they defined as:
"A virtual asset is a digital representation of value that can be digitally traded, or transferred, and can be used for payment or investment purposes. Virtual assets do not include digital representations of fiat currencies, securities and other financial assets that are already coverd elswhere in the FATF Recommomendations."

Where... did they come from?
A brief hisory

- 1992 – Cypherpunks

- A cypherpunk is any activist advocating widespread use of strong cryptography and privacy-anhancing technologies as a route to social and political change.

- *"Privacy is necessary for an open society in the electronic age... We are defending our privacy with cryptography...and with* <u>*electronic money*</u>*"*.
  (Eric Hughes, 'A Cypherpunk Manifesto, 1993)

Where... did they come from?

Electronic money:

1) **Conventient**

2) **Untraceable**

3) **Liberated** from the oversight of governments and banks

How does a normal card payment work?

1
- I present my debit card at the hotel to pay my bill.

2
- The card reader communicates with the hotels bank via a merchant acquirer.

3
- The hotel's bank communicates with my bank via another merchant acquirer.

4
- My bank pays the hotel's bank via the second merchant acquirer.

5
- The hotel's bank confirms receipt of payment via the origanl merchant acquirer.

- Payment is approved by the hotel card reader.

- The transaction involves the hotel, two banks, and two merchant acquirer services.

5
- Fees are extracted by each bank and merchant acquirer and often the retailer.

How does a Bitcoin transaction operate?

1
- I present the app on my phone or other device to the retailer.

2
- The retailer's Bitcoin app checks my Bitcoin wallet via the blockchain.

3
- The Bitcoin is transferred from my wallet to the retailer's wallet via the blockchain.

- The transaction is recorded publicly on the blockchain.

- The transaction involves me, the retailer and the Blockchain.

1
- No fees are extracted therefore, no one profits other than the retailer.

TRANSACTIONS

- In simple terms the transfer of bitcoin from one address to another. More precisely a transaction is a signed date structure expressing a transfer of value. Transactions are transmitted over the bitcoin network, controlled by **miners,** and included in blocks, made permanent on the blockchain.
- Each transaction has two sides, inputs and outputs.
- The **inputs** show the amount being sent and what sender addressed are involved.
- The **outputs** show the amount of bitcoin being credited and the recipients address.

inputs: 2 (0.00292888 BTC)	unique addresses: 2, source transactions: 2	outputs: 2 (0.00291008 BTC)		unique addresses: 2, spent: nothing
o. 1LmYcTgoxYCBN9iVjXtuJkUMMww3ZKTJdf 0.00252617 BTC prev. tx		o. 16KnJRPXbNu3aJraaMMX274k2VYGPoMDSc (change address)	0.00039096 BTC unspent	
1. 16KnJRPXbNu3aJraaMMX274k2VYGPoMDSc 0.00040271 BTC prev. tx		1. 3BZWU6A4mK6neCte3U9qspmy6ZKJ5YHLrA ▮ CoinPayments.net	0.00251912 BTC unspent	

- Importantly the inputs and outputs do not necessarily add up to the same amount.
- This is because there is a **fee** to pay for including a transaction in a block. As outlined computational power and energy is consumed when a block is mined. The fee provides some compensation for those carrying out the mining activity.

MINING

- In the previous slide we have looked at the concept of a **blockchain**. This is the **public ledger** of all transactions which everyone in the Bitcoin network accepts as the authoritative record of ownership.
- How though can everyone agree on this record without having to trust anyone else?
- How can the record withstand attack from dishonest or malicious parties?

- Bitcoin looks to solve this by creating what is essentially a **lottery** in which the winner gets to include transactions in the ledger (blockchain).
- Importantly though **the financial incentives** of this process encourages **honest behaviour** from the participants.

- There is a cost to entering the lottery as generating the winning numbers is a random process which requires **computer processing power**. Generating this power costs the participants in electricity expended.

MINING

ICELAND WILL USE MORE ELECTRICITY MINING
BITCOINS THAN POWERING IST HOMES IN 2018

MINING

The University of Cambridge's online tool estimates Bitcoin's annual electricity consumption is more than The Netherlands, United Arab Emirates and Argentina

MINING

- **The winner of the lottery** gets to mint a number of new bitcoins and **claim the transaction fees** (coinbase transaction) for the ledger entry they have created (a block).
- However they cannot claim this reward **until a timelock has passed**.
- In the meantime if any node rejects any of the transactions in the ledger entry (block) because the rules have not been followed the winner loses their reward.

- As a result of dishonest behaviour has serious economic costs for participants. Further to this the ongoing success of the network provides participants with the opportunity of long term rewards through th asset appreciating in value.
- Dishonest behaviour would have a high risk of **undermining the value of the asset** and reducing the long term opportunities through loss of confidence in the protocol.

- **Participants** are called **miners,** the **lottery process** is called **mining** and the concept behind it is **proof of work**. Miners can also be nodes on the network.
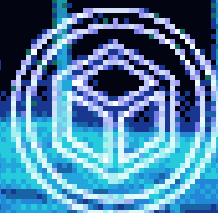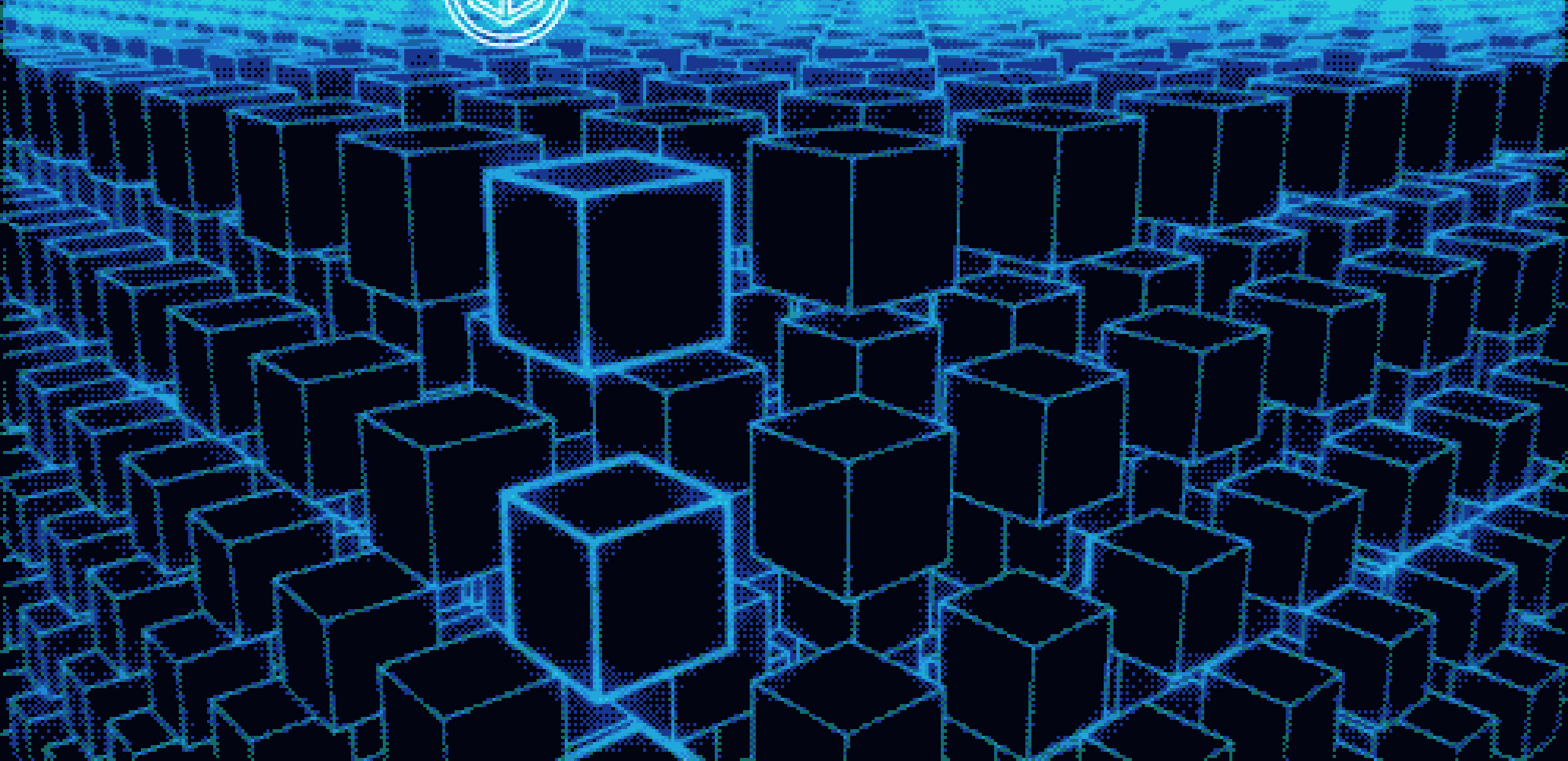
PROOF OF WORK EXPLAINED

Blockchain hashing?!

Cube D

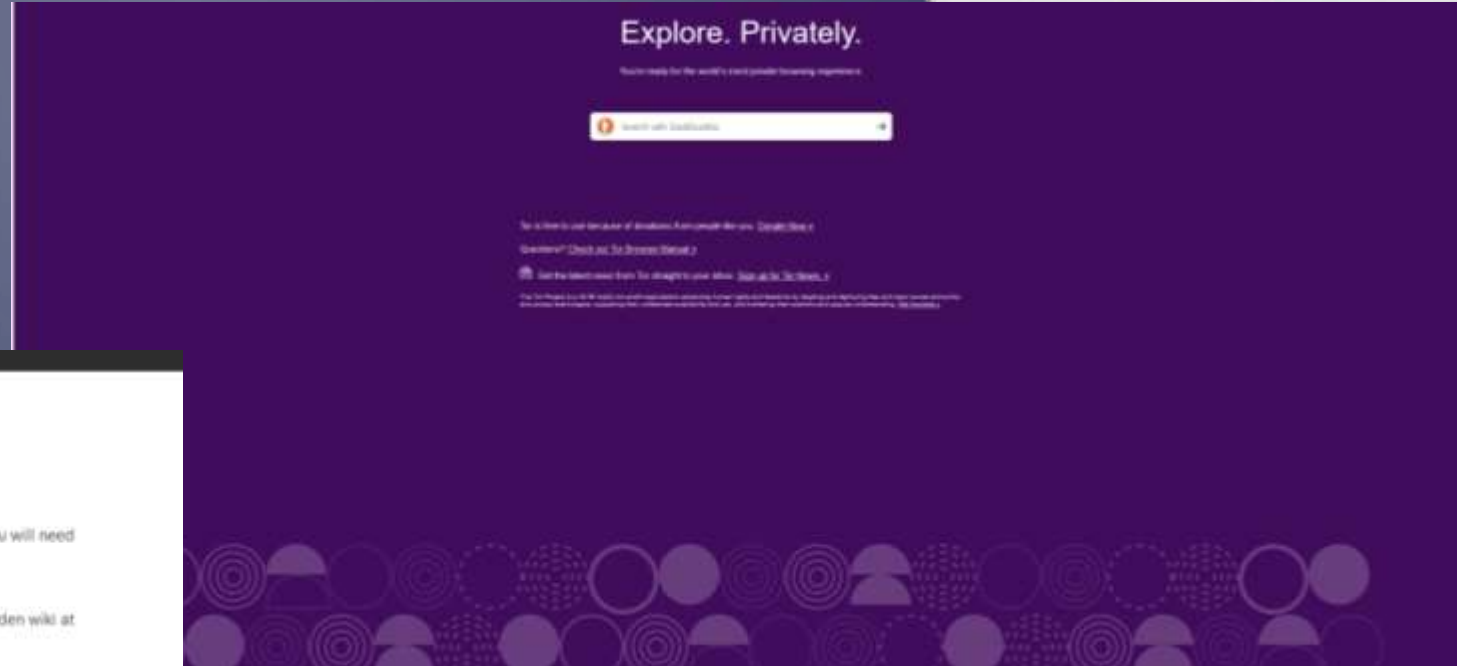# Why do people use it?

- **Spend it:**

    In 2010, 10.000 bitcoins were used to buy 2 pizza's
    - Value determined
    - No bank needed
    - No 3rd party needed

- **Darkweb market places**

Why do people use it?

Explore. Privately.

Links to Dark Web Markets

Welcome to our site. Below, you will find a list of links to dark web markets for your research. Before navigating markets on the dark web, you will need to install the TOR browser. We describe the process below, at the bottom of the page.

For an up to date list of markets you can always check **http://tormarketsfxi2my.onion/** and there are many more dark web links on the hidden wiki at **http://hiddenwiki7wlyzr.onion/**

Appollon
http://apolloncbh3sgd23.onion

Avaris
http://xnwoz5jjwzsubdzs455ab2svrzupdk3wwrjy77gkhc66nyxaiyhwtkid.onion

BitBazaar
http://ign6nnulov7ictpon2kjnroosncu5i7sqaybwhd6ase3rs5es2h3fkid.onion

Cannahome
http://cannahome5zoy2sc.onion

Cannazon

How does it work?

Indicators:

- Mobile Apps

- Browser history

- Hardware wallets
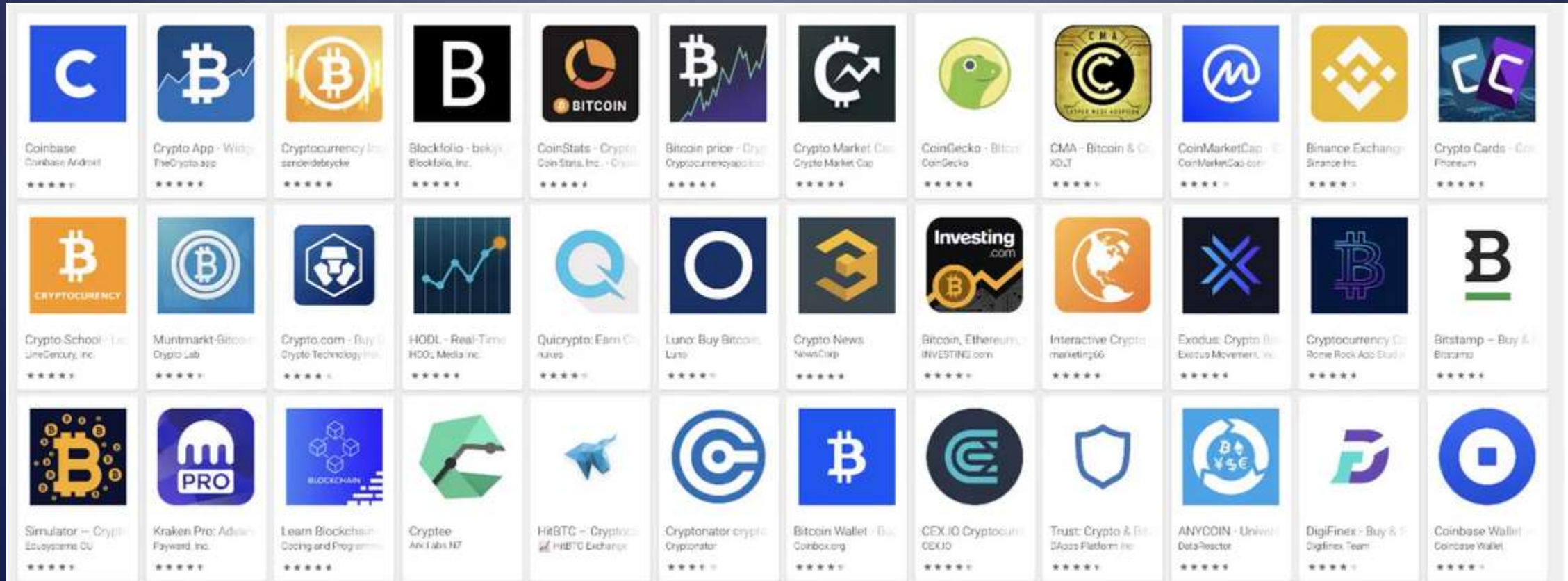
- ToR Browser

How does it work?

Hardware wallets:
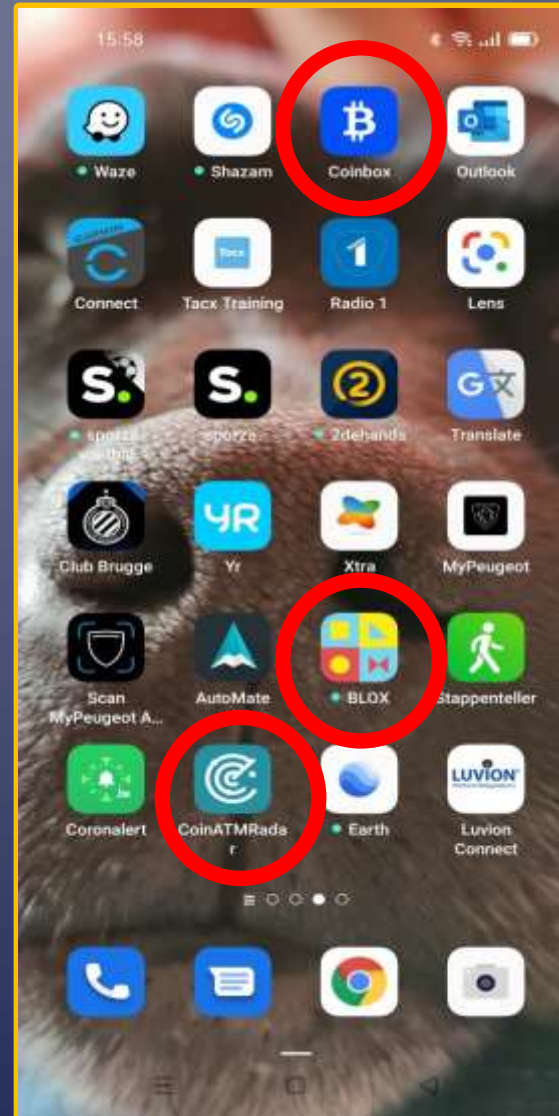
- Keep Key

- Ledger

- Nano

- Trezor

How does it work?

Mobile wallets

How does it work?

Mobile wallets

How does it work?

Paper wallets
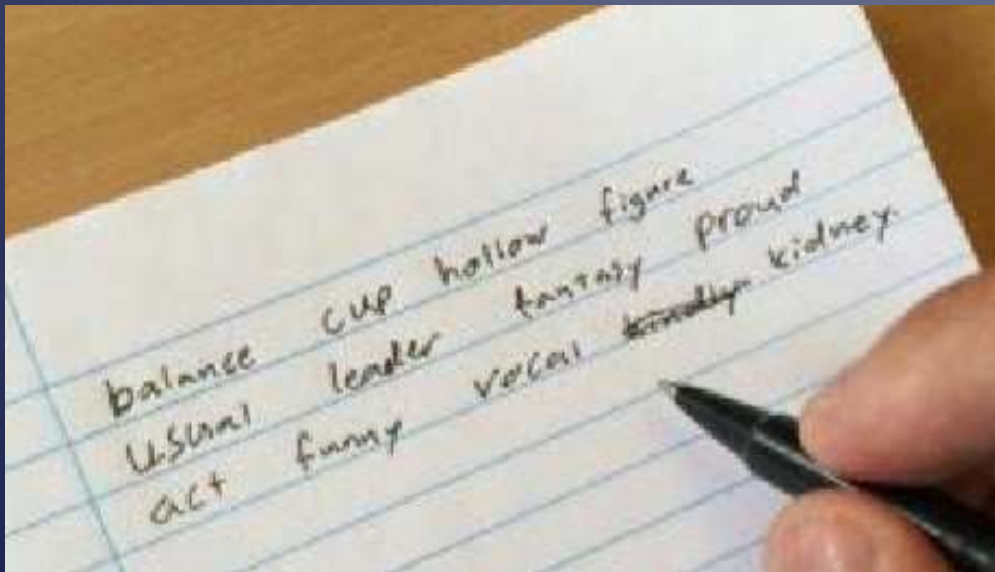
- QR codes
- Private key or
- Public key

How does it work?

Recovery seeds

- 12, 18 or 24 random words

How does it work?

People horrified by story of man who lost password to $220m worth of bitcoin: 'Panic inducing to read'

Hundreds of people are commiserating with a man who has lost his password for accessing his 7,002 bitcoin, worth about $220m, and has just two attempts left before he is locked out forever.

Speaking to *The New York Times*, Stefan Thomas, a German programmer living in California, revealed that he was gifted the bitcoin, which has fluctuated in value over the years before recently surging, as a reward for making an animated video about bitcoin in 2011.

According to Thomas, he lost the password to his IronKey, an encrypted hard drive that holds the keys to his digital wallet, the same year.

Since then, Thomas told the outlet he has tried eight variations of his commonly used passwords in an attempt to gain access to his IronKey.

Unfortunately, his chances are running out, as IronKey only allows users 10 attempts before it "seizes up and encrypts its contents forever," *The Times* notes.

INDEPENDENT

Bitcoin is also unable to help, as it does not store passwords, but rather grants individuals who buy bitcoin a private key to their digital wallet - which only they have access to.

How does it work?

Receipts

- ATM receipts:
  - How much deposited
  - The type of crypto
  - Destination

SatoshiPoint
BUY CRYPTO RECEIPT

TX ID: REUIT3
Time: 14.02.2018
12:18:41
Price: 5.00 GBP
Crypto: 0.030791 LTC
Rate: 1 LTC =
162.385113 GBP
Destination:
LhPhysEwBK8LxaZEhia
YFs5pzD4E9XTLWb

Keep this receipt!

Location:Post Office
Moorgate ,
satoshipoint.com, 020
3026 6037

Cryptocurrency and illicit finances

<u>Typology 1</u>

Prepaid cards:

- Exchange crypto for fiat currency
- Load fiat currency onto card
- Spend fiat currency using card, or withdraw cash at ATM

Cryptocurrency and illicit finances

Typology 2

CATMs (Cryptocurrency ATMs):

- Mostly cash only

- Independent Supermarkets
- Takeaways
- Gas stations

- AML controls?

Cryptocurrency and illicit finances

Typology 2

//coinatmradar.com

CATMs (Cryptocurrency ATMs):
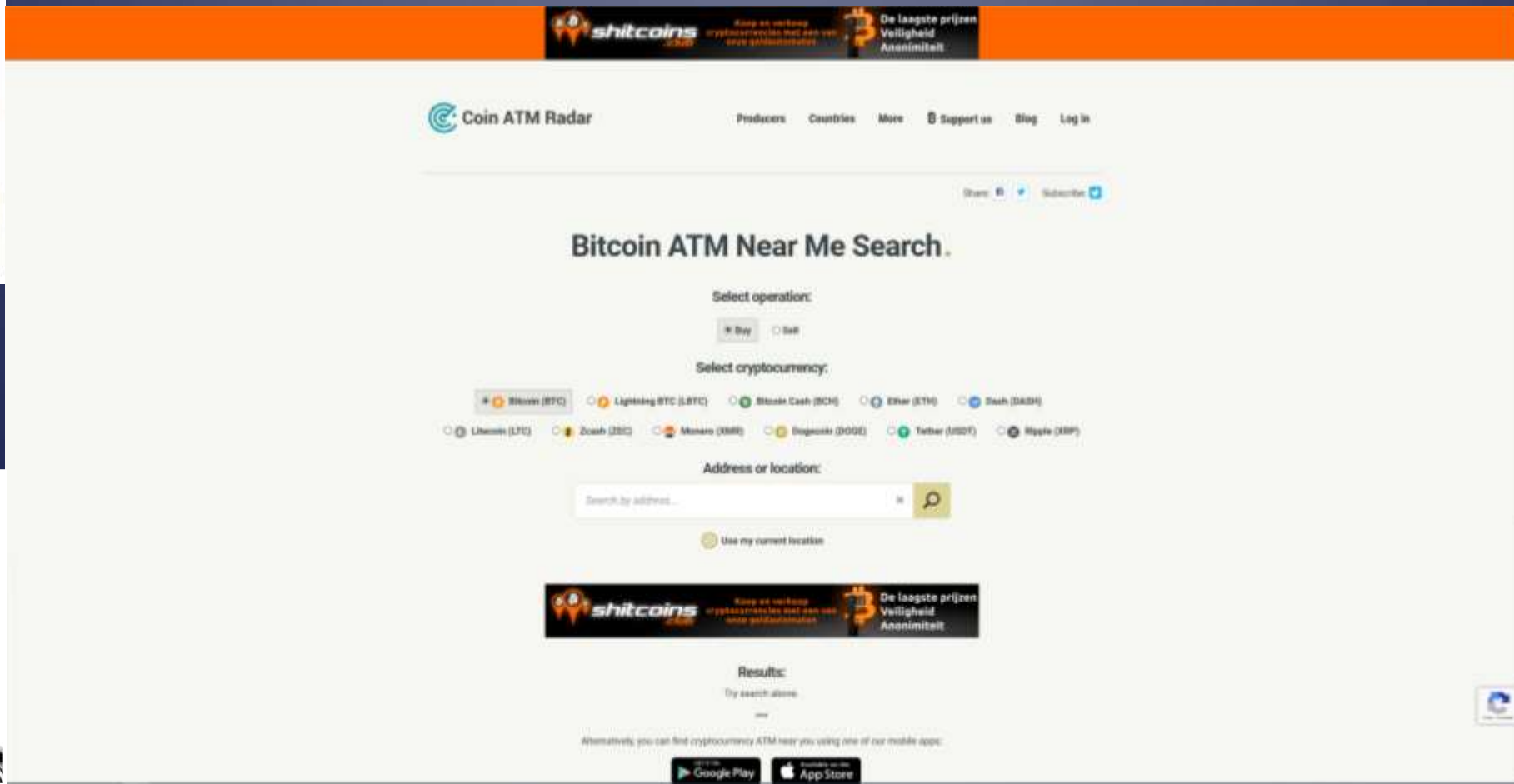
Cryptocurrency and illicit finances

Typology 2

CATMs (Cryptocurrency ATMs):

//coinatmradar.com

Bitcoin ATM Near Me Search.

Select operation:

● Buy ○ Sell

Select cryptocurrency:

● ₿ Bitcoin (BTC) ○ ⚡ Lightning BTC (LBTC) ○ ₿ Bitcoin Cash (BCH) ○ ◆ Ether (ETH) ○ Ð Dash (DASH)

○ Ł Litecoin (LTC) ○ ⓩ Zcash (ZEC) ○ ◉ Monero (XMR) ○ Ð Dogecoin (DOGE) ○ ⓣ Tether (USDT)

○ ✕ Ripple (XRP)

Address or location:

via della fiamme, lido di ostia   ✕   🔍

◎ Use my current location

Results:

Promoted location nearby:

Punto ATM Bitcoin in Rome

at Via Emanuele Filiberto, 34

Based on your search input we found *"Lido di Ostia, Rome, Italy"* and show locations nearby.
If this location is wrong, please make a more specific search.

Cosi è La Pizza il Bistrot	19 km	Rome	Fees: Buy: 9.5% **updated online** 5% Off BTC2022	Limits: Unknown	Score: +1 — Details
Nuvole D'aromi 2.0	21 km	Rome	Fees: Buy: N/A, Sell: N/A 5% Off BTC2022	Limits: Unknown	Score: +22 — Details
X Telefonja	22 km	Rome	Fees: Buy: N/A	Limits: Buy: EUR 3000/txn, Daily: EUR 100000	Score: +1 — Details
ListoSolution	22 km	Rome	Fees: Buy: N/A	Limits: Unknown	Score: +2 — Details

Cryptocurrency and illicit finances

Typology 2

CATMs (Cryptocurrency ATMs):

//coinatmradar.com

Bitcoin ATM machine in Rome at Nuvole D'aromi 2.0 – General Bytes.

Location

- 📍 **City:** Rome 🇮🇹
- 🏪 **Location:** Nuvole D'aromi 2.0
- 📞 **Business phone:** Show number →
- 📍 **Address:**
  Viale dei Colli Portuensi, 240b
  Rome RM 00151
  Italy
- 🕐 **Open hours:**
  Mon: 4:00 pm – 7:30 pm
  Tue-Sat: 10:00 am – 1:00 pm, 4:00 pm – 7:30 pm
  Sun: Closed

Bitcoin machine details

- 🖥 **ATM Type:** General Bytes **GB**
- 💳 **Supported coins and fees:**

5% Off Coupon code: **BTC2022**

Coupon expires on 31-Dec-2022.
Discount applies to fees.

❗ Operator disabled price reporting or information is outdated.

	Buy	Sell
🟠 Bitcoin	✔	✔
	Fees: reporting disabled	Fees: reporting disabled
🟢 Bitcoin Cash	✔	✔
	Fees: reporting disabled	Fees: reporting disabled
🔵 Ether	✔	✘
	Fees: reporting disabled	
🔵 Litecoin	✔	✔
	Fees: reporting disabled	Fees: reporting disabled
✖ Ripple	✔	✘
	Fees: reporting disabled	
Supported fiat:	EUR	EUR

Cryptocurrencies and Finances

Typology

CATMs (Cr

//coinatmradar.com

Cryptocurrency and illicit finances

Typology 2

CATMs (Cryptocurrency ATMs):

//coinatmradar.com

KENYA SCHOOL
OF MONETARY
STUDIES (KSMS)

A School of the Central Bank of Kenya

Bitcoin ATM Near Me Search.

Select operation:

◉ Buy   ○ Sell

Select cryptocurrency:

◉ Bitcoin (BTC)   ○ Lightning BTC (LBTC)   ○ Bitcoin Cash (BCH)   ○ Ether (ETH)   ○ Dash (DASH)

○ Litecoin (LTC)   ○ Zcash (ZEC)   ○ Monero (XMR)   ○ Dogecoin (DOGE)   ○ Tether (USDT)   ○ Ripple (XRP)

Address or location:

Mathare North Road, Off Thika, kenia   ✕   🔍

◎ Use my current location

Cryptocurrency and illicit finances

CATMs (Cryptocurrency ATMs)

//coinatmradar.com

General Bytes bitcoin ATM at Kenrail Towers in Nairobi Ring Rd Parklands

Cash in!

Scan QR-code

Enter hardware wallet

bitcoin ATM

@BitcoinKE

General Bytes bitcoin ATM at Kenrail Towers in Nairobi Ring Rd Parklands

KSMS

Kenrail
Towers

Afstand meten

Klik op de kaart om je pad toe te voegen

Totale afstand: 6,80 km (4,22 mijl)

Cryptocurrency and illicit finances

Report a problem

Operator details

Operator's name: Shitcoins Club

📞 +48 797 090 008

✉ shitcoins@shitcoins.club

On the map: All Shitcoins Club bitcoin ATM locations

Are you operator? Check the list of services we provide.

Location

City: Oostkamp 🇧🇪

Location: Gulf Gas Station

📞 Business phone:
Show number →

📍 Address:
Legeweg 151
8020 Oostkamp
Belgium

⏰ Open hours:
Mon-Fri: 7:30 am – 2:00 pm
Sat-Sun: 7:30 am – 5:00 pm

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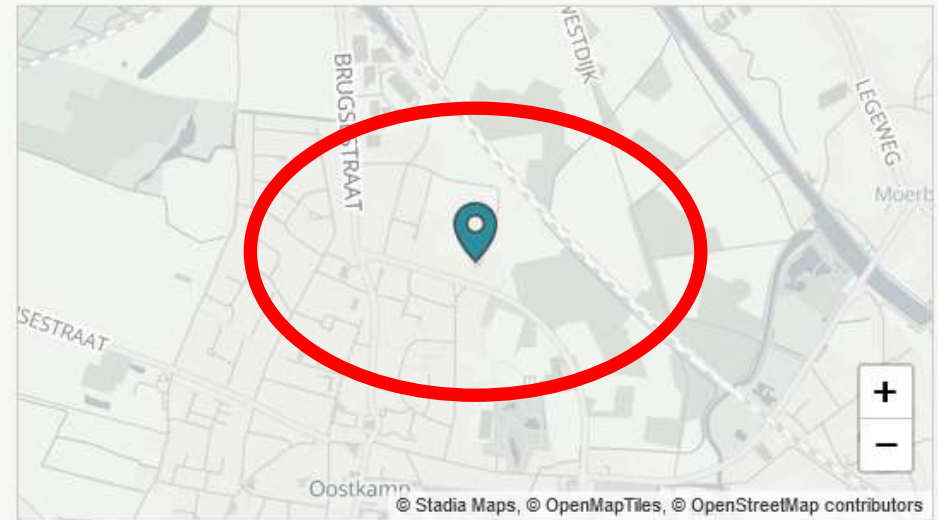
	Nearest	Best Buy	Best Sell

Closest bitcoin ATM locations:

	Royal Shop	5.4 km
	Hyundai Wulffaert	24 km
	Akel Supermarkt	34 km

Operator details

shitcoins .club

💼 **Operator's name:** Shitcoins Club

📞 +48 797 090 008

✉️ shitcoins@shitcoins.club

🗺️ **On the map:** All Shitcoins Club bitcoin ATM locations

Are you operator? Check the list of services we provide.

Location

🏙️ **City:** Oostkamp 🇧🇪

🏬 **Location:** Gulf Gas Station

📞 Business phone:

Show number →

📍 **Address:**
Legeweg 151
8020 Oostkamp
Belgium

🕐 **Open hours:**
Mon-Fri: 7:30 am – 2:00 pm
Sat-Sun: 7:30 am – 5:00 pm

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Nearest | **Best Buy** | **Best Sell**

Closest bitcoin ATM locations:

	Royal Shop **shitcoins** .club	5.4 km
	Hyundai Wulffaert	24 km
	Akel Supermarkt	34 km

Cryptocurrency and illicit finances

Typology 2

CATMs (Cryptocurrency ATMs)

In the vicinity of an investigator's home.
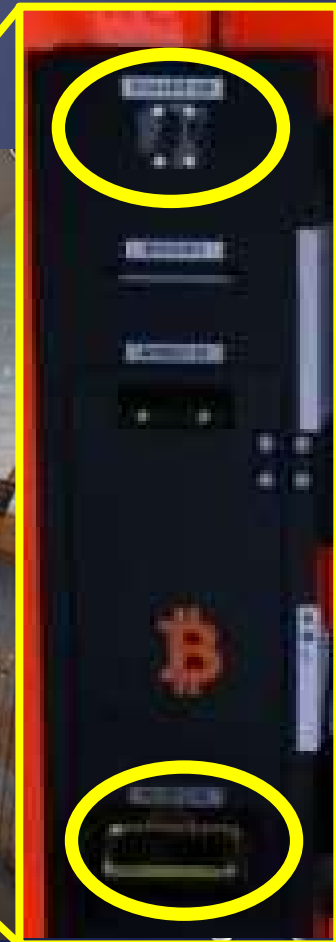
//coinatmradar.com
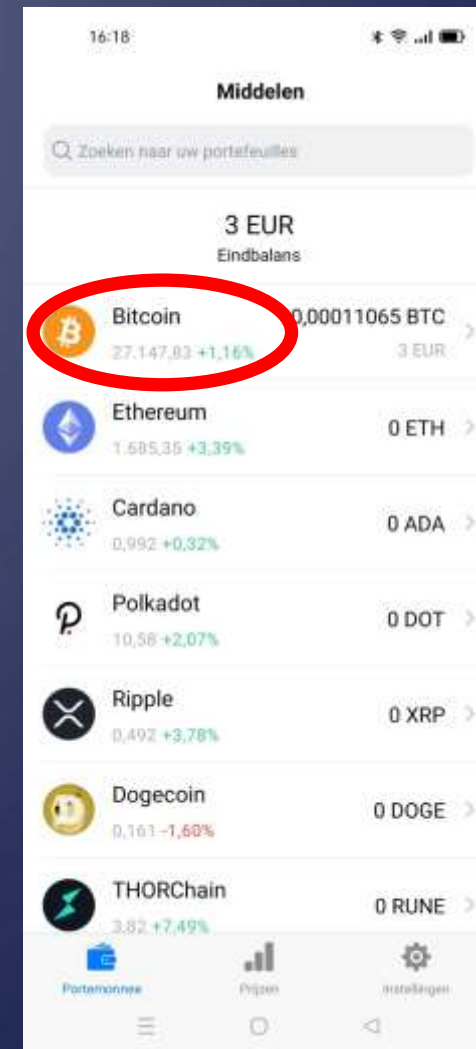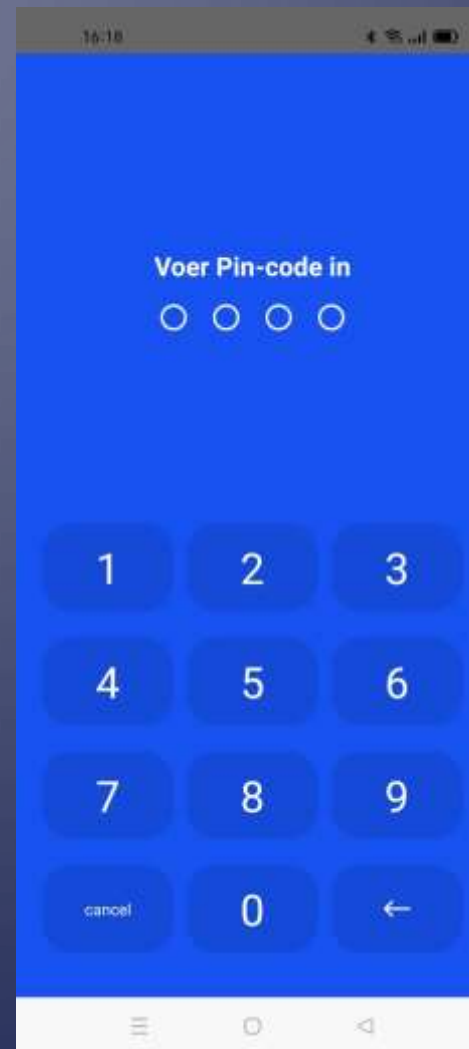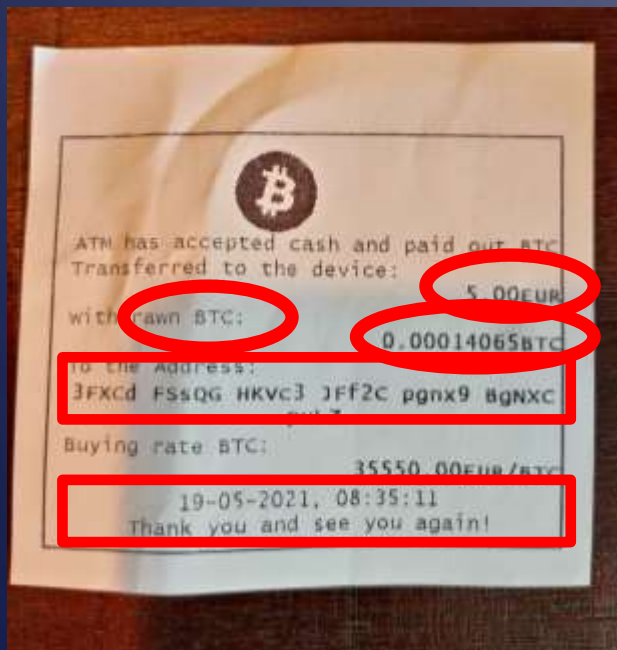
Cryptocurrency and illicit finances
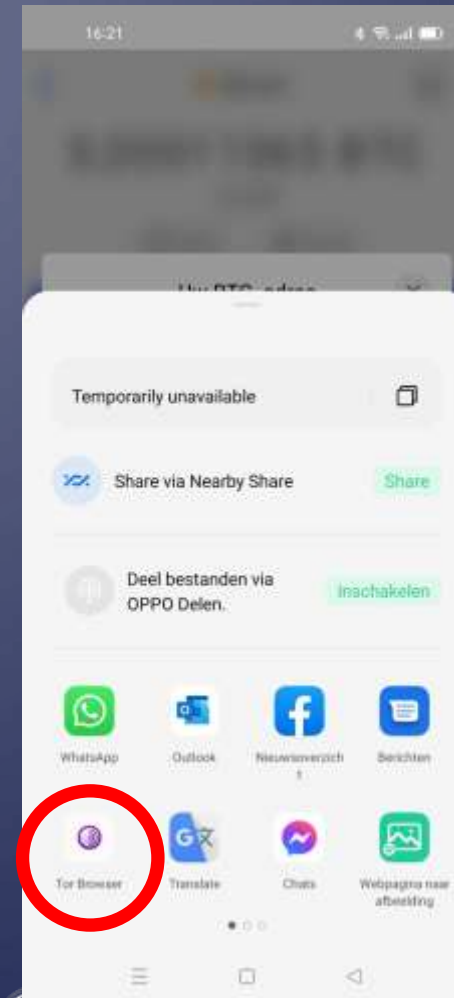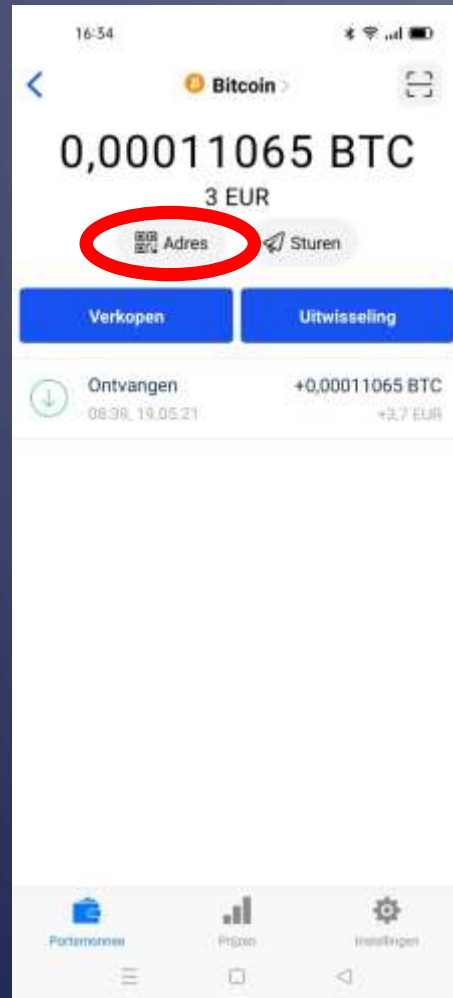
Cryptocurrency and illicit finances
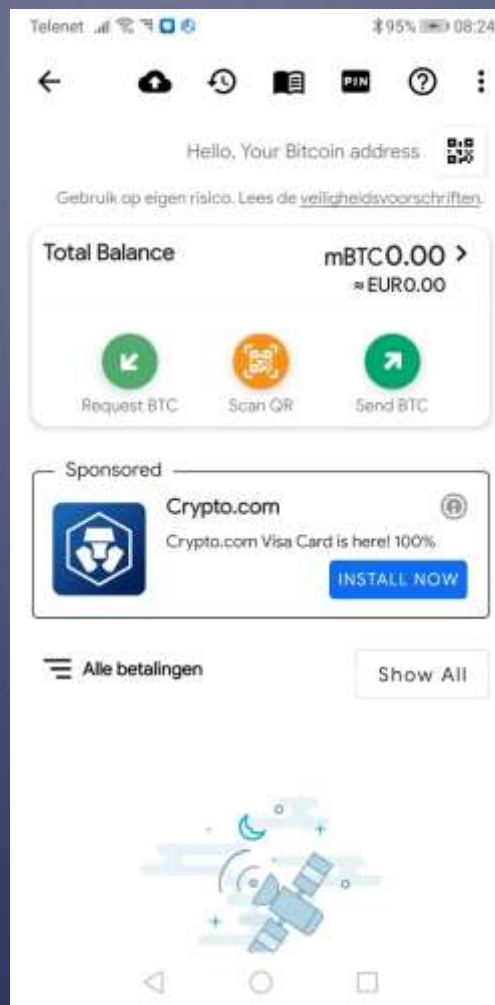
Cryptocurrency and illicit finances

Typology 3

Peer to peer exchange

- Worldwide Brokers – contact via websites
- Buy or Sell

- Range of payment methods:
  - Bank transfer
  - Amazon gift cards
  - Cash

Cryptocurrency and illicit finances

Typology 4:

Cryptocards:

Cryptocurrency and illicit finances

Typology 4:

Cryptocards:

A – URL	https://www.bitwala.com https://app.bitwala.com
B – Location	German company located in : Bitwala GmbH Ohlauer Straße 43 10999 Berlin Germany Company registration number : HRB173698B, Amtsgericht Charlottenburg Germany Support Center Phone : +49 30 2398 0075 support@bitwala.com
c-1 – Verification of the company's credibility	BITWALA issues a non-anonymous cryptocard. It displays the currency EUR. It is delivered by standard mail. The 3D SECURE system is delivered with the card.
c-2 – Search on the card issuer	The BITWALA Mastercard has the BIN 537458 and comes from SOLARIS Bank AG in Belgium. The card is prepaid.

c-3 – Creating an account to access the order	Create an account with an email address and a password.
c-4 – Data required to identify oneself (KYC)	Bitwala only offers BITCOIN crypto-currency. The account management is done through the website or application. KYC is very rigorous. A video interview of nearly 15 minutes is conducted for the KYC verification. Security features of identity documents are verified online and questions about civil status are asked.

Cryptocurrency and illicit finances

Typology 4:

Cryptocards:

24/7 customer support
support@advcash.com

Business and partnerships
business@advcash.com

Kazakhstan
+7 727 350 54 95

Russia
+7 800 777 47 25

A – URL	https://advcash.gi https://wallet.advcash.com
B – Location	Russian company located in : ADV PROJECT LTD Suite 16, Block 5, Watergardens, GX11 1AA Gibraltar
c-1 – Verification of the company's credibility	ADVCash delivers a non-anonymous cryptocard. It displays the currency EUR. The 3D SECURE function is not specified and has not been tested. It is delivered by DHL.
c-2 – Search on the card issuer	ADVCash's VISA card has the BIN 434933. The banking service provider is Laurentian Bank in CANADA. This is a prepaid card.

c-3 – Creating an account to access the order	Create an account with an email address and password
c-4 – Data required to identify oneself (KYC)	8 cryptocurrencies are available, including Bitcoin, Ethereum, Litecoin. The account management is done through the website or application. The latter, it is not in the Playstore but on the website appsgeyser.io by allowing data from an unknown source to be downloaded.

Advanced Cash Limited is a licensed payment service provider authorized by the Belize Financial Services Commission (FSC), licenses MT 000107/97, PPS 000107/98.

LET'S BREAK OUT!

How would you launder your dirty money, using crypto's?

Group 1 & 2: You've got 5.000.000,00 EUROS in cash, the profits of you selling narcotics.

Group 3 & 4: You've got 5.000.000,00 EUROS dirty money in a Swiss bank account, the results of tax crimes.

GO TEAM!

20 min

Benefits to criminals

- **Accounts can't be frozen if identified**

- **Exchanges without KYC** (know your customer)

- **Limited law enforcement skillset**

- **Decentralised nature avoids reporting mechanisms**

- **Bitcoin ATM's and smurfing**

Benefits to criminals

- **Pseudo-anonymous nature of crypto**

- **Easy to carry and store**

- **Availability of additional layers of anonymity mixer/coinjoin**

- **Privacy coins**

- **Easy to move internationally**

- **Bitcoin traders – no central party**

BitCoin is in fact "PSEUDO ANONYMOUS"
While all BitCoin addresses and transactions are public, the holders of those addresses remain hidden.
Keep in mind that as soon as you connect your BitCoin address to your real identity, the pseudo anonymity provided by BitCoin is lost.
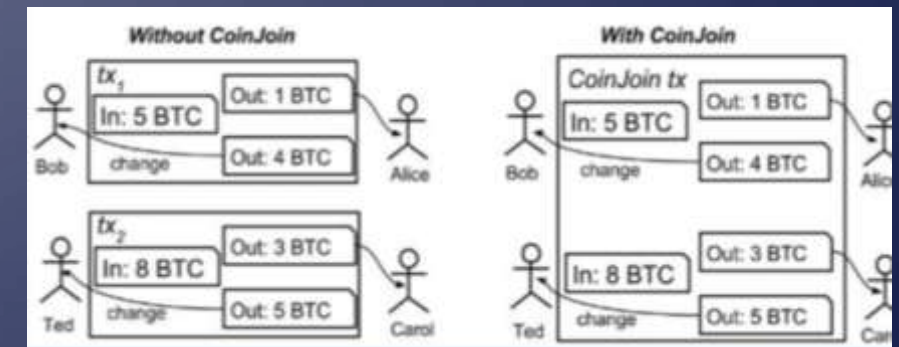
TAX EVASION

- There is certainly the potential for individuals to use cryptocurrency as a means of hiding assets to avoid paying tax. Enforcement agencies are behind the curve currently on how to tackle this issue. The IRS in the USA have taken to demanding records from exchanges to identify users. Others are still uncertain on what constitutes a taxable event and what doesn't.

- The main issue for agencies is identifying who owns cryptocurrency assets and what action they are taking with them. Protocols with a strong stance on privacy make this very difficult and savvy users could look to take advantage of this.

- The problem for users is turning assets into cryptocurrencies without leaving a trace for regulators. Recent research outlines "Large receipted sums are difficult to manage or spend anonymously , and cryptocurrencies still require infrastructure to manage and spend." (RAND, 2019). This is corroborated by the detail above highlighting that exchanges are being pursued by enforcement agencies for user information.

Bitcoin mixing - Coinjoin
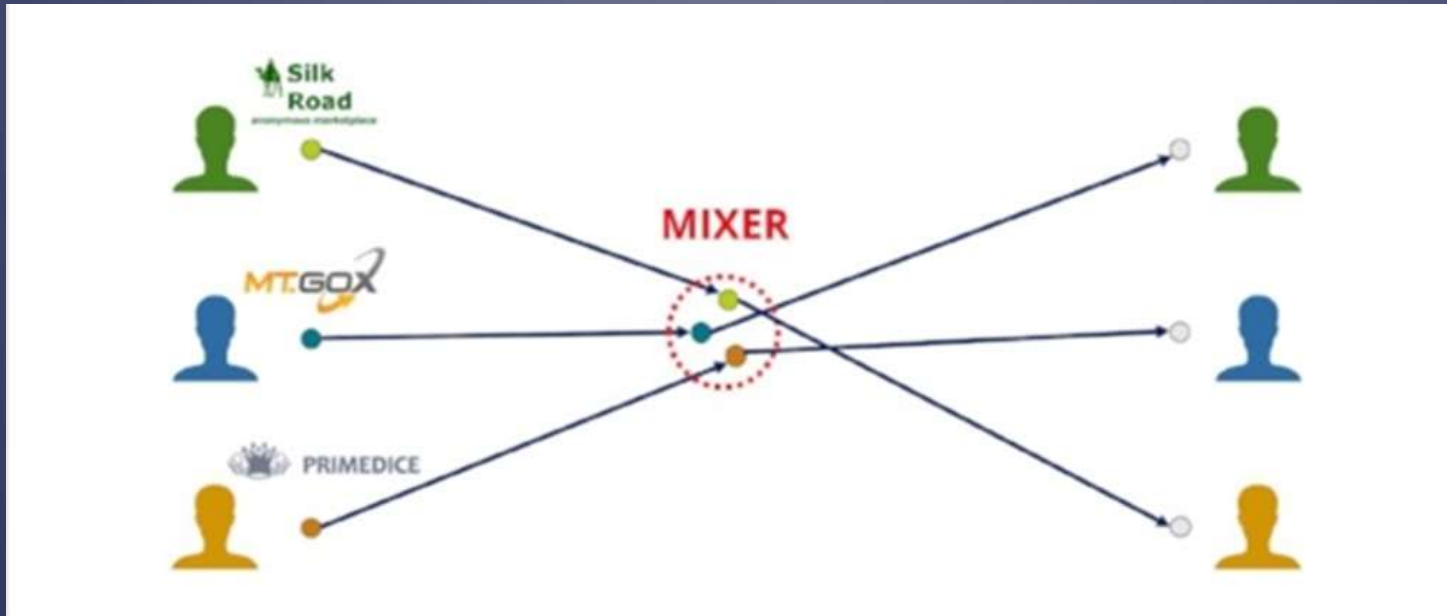
A (highly-simplified) view of what happens on a bitcoin mixer: enabling its users to break the link to the source of their bitcoins.

Used efficiently bitcoin mixing or "coinjoins" can break the audit trail and make it very difficult to attribute ownership of the assets. There is however a caveat to this, the user must kno how to safeguard their privacy at each step of the process.

https://youtu.be/aRds5RvexYg

Bestmixer vs money laundering

CONSIDERATIONS PRIOR TO SCENE ATTENDANCE

- WHAT INTELLIGENCE HAS BEEN RECEIVED INDICATING THE SUSPECTS INVOLVEMENT IN POSSESSION/USE OF CRYPTOCURRENCY?

- HOW IS CRYPTOCURRENCY USED IN THE CRIMINAL ACTIVITY IDENTIFIED? WHAT POTENTIAL INSIGHTS DOES THIS PROVIDE ON HOW CRYPTOCURRENCY WILL BE STORED BY THE SUSPECT?

- WHAT SECURITY MEASURES MAY THE SUSPECT HAVE PUT IN PLACE? WHAT OPPORTUNITIES ARE THERE TO OVERCOME THESE?

- HOW WILL WE AIM TO IDENTIFY CRYPTOCURRENCY ASSETS HELD BY THE SUSPECT? E.G. COMPUTER EXAMINATIONS, MOBILE PHONE SEIZURE, SEARCHES FOR RECOVERY SEEDS AND HARDWARE WALLETS

- WHAT TOOLS AND PROCESSES WILL BE USED TO CONFIRM WHAT ASSETS ARE HELD BY THE SUSPECT? E.G. SEARCHES OF ADDRESSES ON WEBSITES, USING RECOVERY SEEDS, OPENING WALLET SOFTWARE ON DEVICES.

- WHAT EQUIPMENT IS NEEDED TO SUCCESSFULLY COMPLETE A SEIZURE IN THE CIRCUMSTANCES?

- CAN WE GUARANTEE ACCESS TO THE INTERNET?

VIRTUAL CURRENCY SEIZURE

Seizure at scene of physical entity containing keys to cryptocurrency assets.

1. Seize the medium containing the private key/recovery seed. This can be paper wallets, hardware wallets, written records of recovery seeds etc.

2. Seize the passwords/codes related to wallets. Consider any 2FA devices which might be required

3. If any public keys/asset addresses are visible check for values on a block explorer. Record these and any transaction history displayed.

4. When placing passwords/codes, paper wallets and private keys/recovery seeds in exhibit bags ensure they have been placed in an envelope first. This envelope should be sealed at this point.

5. Exhibits should be brought to a safe place such as a virtual currency safe at a secure location as soon as possible.

Inform Financial Investigators of seizure

HM Revenue & Customs

POINTS TO CONSIDER

It will not always be necessary or advantageous to seize the cryptocurrency asset. It might be of such limited value that it does not seem appropriate to seize. Alternatively we may feel other actions we have taken has sufficiently secured the asset. This is a discretionary decision for the individual completing the process. However it is important on each occasion to provide a clear policy log detailed the rationale for decisions made.

It is necessary on ever occasion to fully record the transaction history, addresses linked to the wallet and amount of cryptocurrency remaining. The matter can then be discussed with FI's at a later point to identify if there are any proceeds of crime opportunities over historic values or holdings of the asset etc.

Some wallet applications may have different transaction histories, transparent and shielded. Always check for this. It's possible that hardware wallets will have hidden accounts on them. These usually have a 25 word recovery seed. Check the scene for anything of this nature to help identify this.

POINTS TO CONSIDER

- PLANNING AN INVESTIGATION STRATEGY IS AN IMPORTANT PART OF EFFECTIVELY INVESTIGATING SUCH OFFENCES. AS THE SAYING GOES FAIL TO PREPARE, PREPARE TO FAIL!

- THIS EXERCISE SHOWS HOW BLOCKCHAIN ANALYSIS IS NOT A SIMPLE SUBJECT. THERE IS A LOT OF NUANCE AND IT IS NOT A QUICK ENQUIRY. THIS IS WHY IT IS IMPORTANT TO HAVE A PROCESS THAT ALLOWS YOU TO REVISIT INFORMATION AND SPEND TIME ANALYSING IT. THE INVESTIGATION STRATEGY ALSO NEEDS TO RECOGNISE THIS AND SEEK TO EXPLORE EVERY OPTION AVAILABLE TO PROGRESS THE CASE.

- IT ALSO SHOWS HOW QUICKLY YOU COULD GET LOST AS ANALYSING OVER 4,000 TRANSACTIONS IS NOT EASY! THIS IS WHY PARAMETERS ARE IMPORTANT. ALSO IDENTIFYING TECHNOLOGY WHICH CAN HELP WITH ANALYSIS IS KEY TO GETTING THE BEST EVIDENCE OUT OF SUCH ENQUIRIES.

- THERE ARE POSITIVES IN COMPLETING BLOCKCHAIN ANALYSIS IF IT CAN BE MANAGED EFFECTIVELY. IT CAN HELP WITH IDENTIFYING SIGNIFICANT EVIDENCE FOR MONEY LAUNDERING INVESTIGATIONS. WE CAN TELL HOW MUCH HAS GONE TO AN ACCOUNT, HOW REGULAR ACTIVITY HAS BEEN, WE CAN USE DATES/TIMES TO COMPARE AGAINST OTHER RELEVANT INFORMATION E.G. TIMES OF OFFENCE OR BANK STATEMENTS.

FORENSIC TOOLS
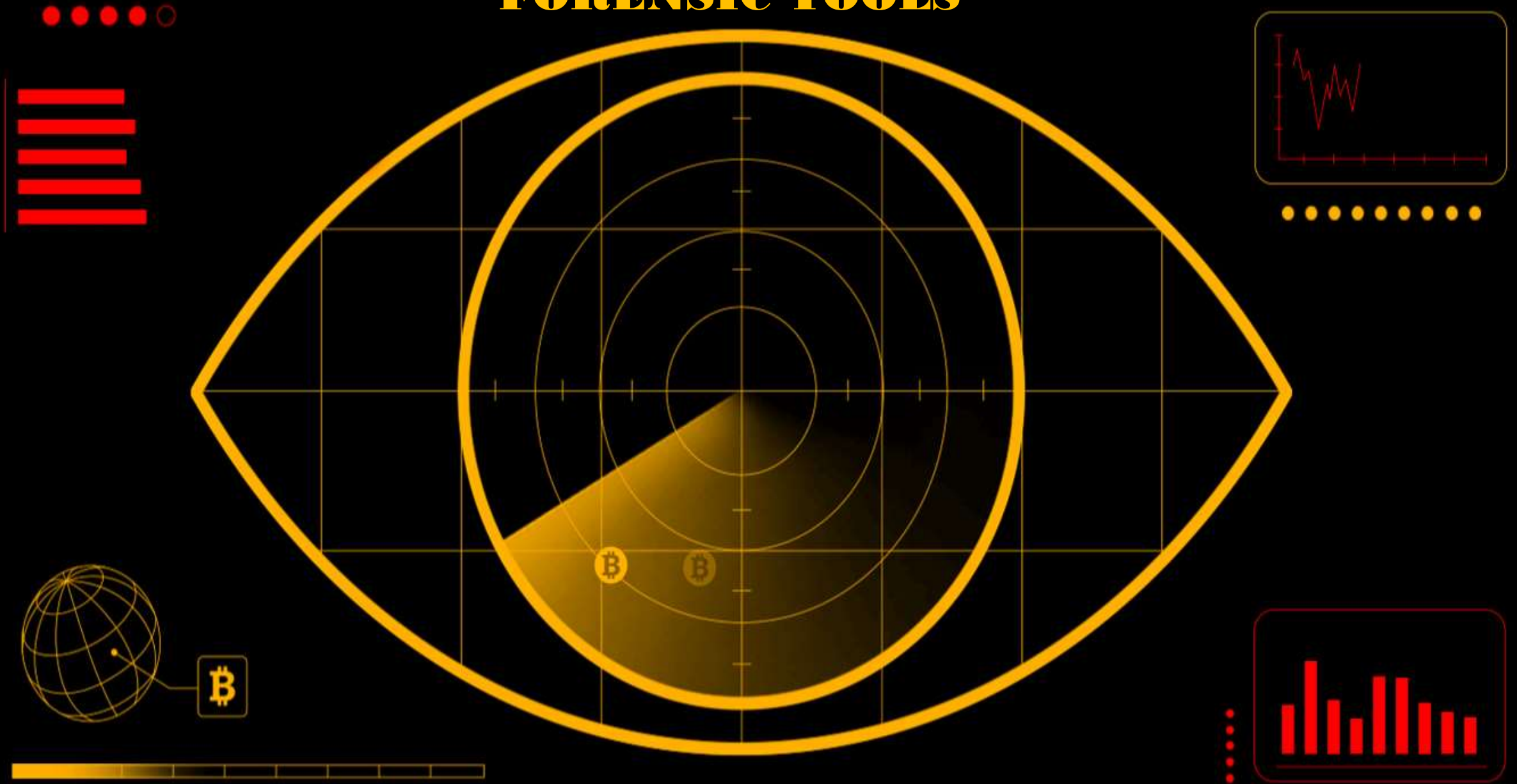
Your countries combined received $401 billion in estimated value between July '20 and June '21 (12 months)

Central, Northern & Western Europe's cryptocurrency value received by country

July '20 - June '21

Chainalysis

Legend: ■ DeFi protocols   ■ Centralized services

1.	Germany	$114,5 billion	45%
2.	Netherlands	$101,8 billion	56%
3.	Spain	$69,0 billion	47%
4.	Switzerland	$68,8 billion	64%
5.	Belgium	$33,0 billion	50%
6.	Hungary	$15,0 billion	57%

Distribution Belgium +/-
24% Bitcoin
26% Stablecoins
10% Altcoins
40% Ethereum (ERC-20)

Countries (x-axis): United Kingdom, France, Germany, Netherlands, Switzerland, Spain, Italy, Portugal, Belgium, Norway, Austria, Ireland, Finland, Sweden, Denmark, Slovenia, Greece, Hungary, Croatia, Estonia, Lithuania, Latvia, Malta, Albania, Luxembourg, North Macedonia, Bosnia and, Monaco, Montenegro, Iceland

A **stablecoin** is a class of **cryptocurrencies** that attemt to offer price stability and are backed by a **reserve asset**.

Stablecoin has gained attraction as they attempt to offer the best of both worlds. The instant processing and security or privacy of payments of cryptocurrencies, and the **volatility-free** stable valuation of fiat currencies!

There are 2 types of stablecoins:
- **Fiat collateralized** stalbe coins maintain a fiat currency reserve (USDT, USDC)
- **Crypto-collateralized** stable coins are backed by other cryptocurrencies (DAI/ETH)

Decentralized Finance

DeFi

Decentralized finance (or **"DeFi"**) is a financial ecosystem based on **blockchain** technology. It lets users buy and sell assets and **financial services** as a form of **investment** or financing without middlemen.

DeFi uses <u>blockchain</u>, which connects users without a central server and can transfer data and assets securely, under the users' own watch. Transactions are regulated under "<u>smart contracts</u>", computer programs that also use blockchain and run automatically when the parameters the parties set in advance are met.

They use blockchain to store and <u>transfer digital assets</u> and <u>smart contracts</u> to make sure the parties keep their end of the bargain.

Decentralized Finance

DeFi

What applications are there within DeFi?

Staking

Staking stands for: storing crypto coins in a wallet for a fixed period of time. By staking you earn a kind of interest that you get deposited in your wallet. The reward you earn from betting cryptocurrency depends on the length of time you hold it. The longer the betting time, the higher the return.It is similar to a fixed deposit in the traditional banking system that is rewarded at the end of the period with a defined interest rate, as stipulated in the contract.

Decentralized Finance

What applications are there within DeFi?

Lending

Lending stands for (temporarily) lending your cryptocurrencies to a platform. This platform then grants loans to companies or private individuals, without the intervention of intermediaries. At the same time, the DeFi lending protocol makes it possible for anyone in the world, anywhere, to earn interest from crypto they lend.

Decentralized Finance

DEFI LENDING AND BORROWING WORKS

1. STABLECOINS
- Stablecoin pegged to fiat (e.g., USD) to mitigate the volatility of digital assets
- Centralized (USDC, USDT) & decentralized stablecoins (DAI, ...)

8. INSURANCE
- Smart contract exploits
- Insurance covers losses

7. PAYMENTS
- Payments as streams
- Pay-as-you-use

2. BORROWING & LENDING
- Collateralization of digital assets to obtain loans
- Lend digital assets & earn interests
- Public accessibility

6. LOTTERY AND GAMES
- Pooled capital into a smart contract
- Earn interests & give it to a winner

3. DECENTRALIZED EXCHANGES
- Exchanges fully on the blockchain, unlike centralized exchanges (e.g., Coinbase)
- Full control of private keys
- Public accessibility

5. FUND MANAGEMENT
- Oversee & manage cash flow
- Passive and active management of investments into digital assets

4. DERIVATIVES
- Possibility to trade with leverage
- Possibility to trade tokenized stocks
- Futures & Options
- Price provided by "oracles"

Source: Schellinger 2021

TODAY'S QUESTIONS:

- WHAT IS A NFT?

- WHAT IS IT BEING USED FOR?

- ARE THEY TAXABLE?

- WHAT ARE THE CHALLENGES?

- CASE SELECTION?

OECD International Academy for Tax Crime Investigation

Conducting Financial Investigations

OECD

WHAT IS A NFT?

OECD International Academy for Tax Crime Investigation
Conducting Financial Investigations
OECD

NFT'S EXPLAINED

NFT stands for **'non-fungible token'.**
A NFT is a digital asset that links ownership to **unique physical or digital objects!**

Art

Real estate

Gaming

Music

NFT'S EXPLAINED

NFTs are sold **online**, via cryptocurrencies, and are the **digital proof of ownership** of an item.

NFTs are recorded on the **blockchain**, which ensures that the asset is **unique**.

NFT-projecten: Bored Ape Yacht Club, Meebits, Mutant Ape Yacht Club, RTFKT Clone X, Azuki

The **blockchain technology** ensures that the NFT cannot be changed or falsified. The registration on the **blockchain** is tied to a digital wallet. Theis crypto wallet contains a digital key with which you can prove that the NFT is your property.

NFT'S EXPLAINED

How Do NFTs work |
Learn All About How Does an NFT Work

Smart contracts:

A **smart contract** is a piece of a code with which certain information is stored on the **blockchain**.
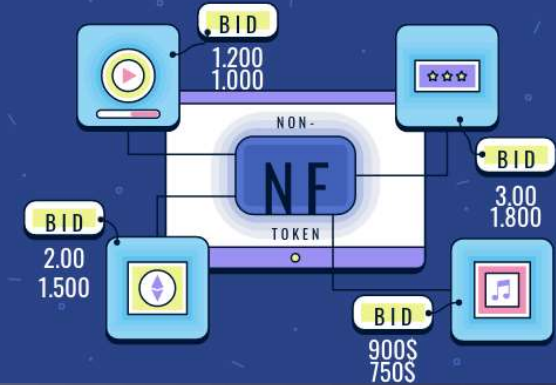
Voor NFT smart contracten wordt een ERC-721 of ERC 115 contract gebruikt.

Smart contract are supported by multiple blockchains like, Ethereum, Solana, Tezos, Binance Smart Chain, etc.

A **smart contract** regulates 2 actions:

- Verifying ownership;
- Ensure that it is possible to tranfer the NFT.

The **smart contract** ensures that the transaction is only executed when the predefined conditions are met and verified.

NFT'S EXPLAINED

NFT-transactions, just like bitcoin transactions, **are visible** on the **blockchain.** Because everything is registered on the **blockchain,** it is possible to trace which address the NFT has created, to which address the NFT was sent, who the current owner is, etc
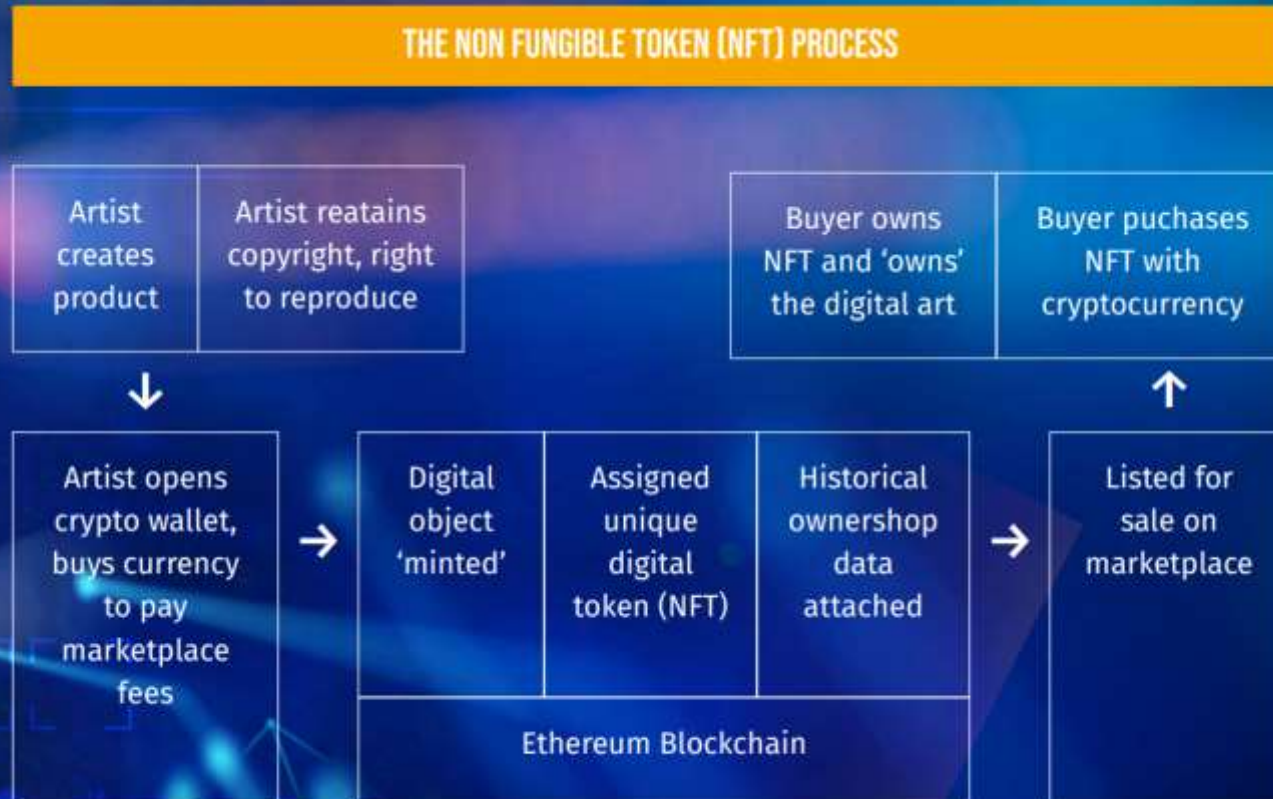
NFT PLATFORMS

Artists can offer NFTs for sale on these platforms/markets.

Buyers can then search the platform and buy the item of their choice.

This is usually done by bidding!

OpenSea has processed more than 10 billion dollar in transactions since its launch in 2017.

NFT PLATFORMS

NFT PLATFORMS

NFT PLATFORMS

The Chainsmokers - S...
by royal-official ✔

This album is for our fans - all of you who supported us, came to a show, streamed a song, liked a p...

Snoop Dogg on Sound ... ✔
by DEATHROWNFT ✔

Created by Snoop Dogg on Sound. Leave a comment on the song at https://www.sound.xyz/snoopdogg

Roberto Carlos x Sport... ✔
by sportsicon ✔

The most attacking left-back in the history of soccer comes to SportsIcon. Just under 1000...

The Association ✔
by NBA ✔

A collection of dynamic NFTs that change in appearance over time based on player and team on-...

Erotic Pink NFT
by NFTerotic

EROTIC PINK
Limited Edition Collection of 301 Cards....

Spatial X ✔
by Spatial_io ✔

Spatial is the Metaverse for culture where artists and organizers are empowered to create the world ...

OpenSea

NFT PLATFORMS

NFT PLATFORMS

NFT PLATFORMS

A crypto airdrop is **a marketing tactic where developers of a specific blockchain project send free tokens to users.** New projects use this strategy to **promote themselves prior to the official launching date.**

Startups use both **crypto airdrops and NFT airdrops to create buzz.** It also increases awareness about their non-fungible token (NFT) collection or cryptocurrency. Airdrops can also boost the price of a token if there is a lot of publicity.

NFT PLATFORMS

Txhash	Blockno	UnixTime	DateTime	From	To	ContractAddress	Value_IN(ETH)	Value_OUT(ETH)	CurrentValue @ $1085.9/E	TxnFee(ETH)	TxnFee(USD)	Historic	Status	ErrCode	Method
0x858af4ac37f13c33f404532866380f7d4fbe440eb13c461b7563a08b4ee2e	1E+07	2E+09	20/03/2022 1:14	0xf6cd827d51ecae00641dbae59ad2aca4c83a3d9c	0xc855d03edb308080e70f0fbc4e2f3be7c383782c		0.1	0	108.59	0.000377215613712	0.409618434929861	2861.26			Transfer
0x8cf795da8d5487de1b1a6c5ef580736664026f26eceef1d3d39eb3c3e043t	1E+07	2E+09	20/03/2022 1:17	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xa5409ec958c83c3f309868babaca7c86dcb077c1		0	0	0	0.010122633012028194	109.921.671.877.614	2861.26			Register Proxy
0x27f1ea1fafda953ffbe6b80f31c51a64cb2208bd933d8a1e42f3ebf2eb4368e	1E+07	2E+09	20/03/2022 1:17	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x79fcdef22feed20eddacbb2587640e45491b757f		0	0	0	0.001175921056693564	127.693.267.546.354	2861.26			Set Approval For All
0xac83ed72431a8f1f159c36e0f76f2738b59481f9613e6c343	1E+07	2E+09	20/03/2022 1:19	0xf6cd827d51ecae00641dbae59ad2aca4c83a3d9c	0xc855d03edb308080e70f0fbc4e2f3be7c383782c		378.219.641	0	4.107.087.081.619	0.000470614369876	0.511039840196348	2861.26			Transfer
0xe25ee6f2baa8617a6ddebcae91decbb9342980b9db3fd36600406aea27f5	1E+07	2E+09	20/03/2022 1:22	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	3.77	4.093.843	0.001045151977346008	113.493.053.220.003	2861.26			Deposit
0xdbeff822e37889f82c394456401ccd9aa2749adb3a2f4fc0d8578d9a15f3	1E+07	2E+09	20/03/2022 1:23	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	0	0	0.000998754887796833	108.454.792.198.582	2861.26			Approve
0x758637e1e5f3d52e6df5cbb7cc927eedc5330990585620f9a41e1fdade2d9	1E+07	2E+09	21/03/2022 16:58	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.3189	34.629.351	0.00744540155474089	808.436.154.829.313	2895.01			Atomic Match_
0x8e833cbaa651a94845f60e1c7404cb32f190434c6f7f3443c7f679351b	1E+07	2E+09	21/03/2022 22:07	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.12	130.308	0.00834583459056079315	906.274.326.982.745	2895.01			Atomic Match_
0x4a0e3ed602ced0c87600655b715573afc5e8d4c663d4dae28fa8b6d373c	1E+07	2E+09	22/03/2022 0:36	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x83c8f28c26bf6aaca652df1dbbe0e1b56f8baba2		0	11.463	124.476.717	0.117396914121033844	127.481.309.044.031	2970.47			0x9a2b8115
0x8200eb99d8150025cccbc6f639632c46b4f4890afe21727526434b52950d1	1E+07	2E+09	22/03/2022 2:21	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x00000000a50bb64b4bbeceb18715748dface08af		0	0.22	238.898	0.011929540135683048	129.542.876.333.382	2970.47			0xc0423cd6
0xfbe644575f7e225602241ea6bbdb4f5e172d876825eebe9e0b27022b5bc0a	1E+07	2E+09	22/03/2022 2:59	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.888	9.642.792	0.0107929864174570445	117.201.039.507.166	2970.47			Atomic Match_
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0x234a9c3aebb3882c5594135f8e766778d4892902be879d29aa7e40e3e3a	1E+07	2E+09	22/03/2022 3:13	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x0000000035634b55f3d99b071b5a354f48e10bef		0	0.385	4.180.715	0.0165108310991135654	179.291.114.818.642	2970.47			0x10064373
0x40842cf6d02aa93d354a38cf9e35d6b8cd96b584338f554d3d53fc573ce4	1E+07	2E+09	22/03/2022 13:40	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	3.11	3.377.149	0.00136362890707798	148.016.846.013.598	2970.47			Deposit
0x54d210e2c70b01d6c4b52055c36a17cefe37327886ef276f6fb4c8d84bde7	1E+07	2E+09	22/03/2022 22:21	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.14	152.026	0.0125617971208235	136.408.554.935.022	2970.47			Atomic Match_
0x488a10fed0ca5caa4810b7044be75594605bf4d360e82902a144ffdb2e6f	1E+07	2E+09	22/03/2022 22:27	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.15	162.885	0.01027997155043443	111.630.271.926.617	2970.47			Atomic Match_
0x0b08f140829cbe7d93ce6f760a598a3f56cfc60cac5a1f489ca0b11d678c0	1E+07	2E+09	22/03/2022 22:30	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.069	749.271	0.0083984262673840f	911.985.108.375.237	2970.47			Atomic Match_
0xf2cb43a3851c5bd56539f0b54128883d1b2548a1c49d35a83e8c09c5b853	1E+07	2E+09	23/03/2022 2:22	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	0	0	0.0000964953370008000	104.784.286.449.169	3032.98			Withdraw
0x79005e7bad40b61f1d0e0749ff9e4ec6bdf8736eea982d8d504670cb8606	1E+07	2E+09	23/03/2022 2:33	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.309	3.355.431	0.00775500497794772	842.115.990.555.343	3032.98			Atomic Match_
0xb06c39b503a01374a05f4589a247913c42db8f05576f681445c08f494425	1E+07	2E+09	23/03/2022 3:16	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x0000000035634b55f3d99b071b5a354f48e10bef		0	0.1225	13.302.275	0.0151334758945364195	164.337.346.684.275	3032.98			0x10064373
0xf16ec432e77e1ce8977afc61bb5534daf90c57370d1dffcf62f0081e0f473c39	1E+07	2E+09	23/03/2022 4:30	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	0	0	0.001579040488831	171.468.008.682.158	3032.98			Withdraw
0x70b0f9fdb0198378b18c238fcd84c29dcc46c5189e5fdfb3d89d1446cb7cb	1E+07	2E+09	23/03/2022 4:36	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	4.24	4.604.216	0.01141301842685795	12.393.396.709.725	3032.98			Atomic Match_
0x24a473e74e2a30a727f171f14857c7601ce7cd028107ebba7f40a48054b95	1E+07	2E+09	23/03/2022 4:39	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x6dc6001535e15b9def7b0f6a20a2111dfa9454e2		0	0	0	0.0016012316327f1315	173.877.742.996.321	3032.98			Set Approval For All
0xbee2743e78bc242d0c6787a3d81a28083bd45ac7249281605202a0d74f17f80d	1E+07	2E+09	23/03/2022 4:40	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x6ce31a42058f5496005b39272c21c576941dbfe9		0	0	0	0.006042667459334091	656.173.259.415.694	3032.98			Stake
0x5f1253bc0d69c71073832048a4af92c5cc1ca390814805217d6952b7dd3e0	1E+07	2E+09	23/03/2022 7:13	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x10064373e248bc7253653ca05df73cf226202956		0	0	0	0.00558082395780771	0.956486735783396	3032.98			Set Approval For All
0xf6d9da90aca4bebb5ad489a35eab3a71e7db4461dd3e989e4e1512431226	1E+07	2E+09	23/03/2022 7:17	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xcbc67ea382f8a006d46eeeb7255876beb7d7f14d		0	0	0	0.00091368608471245	0.9921719389254	3032.98			Set Approval For All
0x25d62a6e262b650c4931fc0035736d4951dbf8d6b53a128571130efec5fca	1E+07	2E+09	23/03/2022 11:23	0xf6cd827d51ecae00641dbae59ad2aca4c83a3d9c	0xc855d03edb308080e70f0fbc4e2f3be7c383782c		0.36236699	0	393.494.314.441	0.000532541952369	0.578287306077497	3032.98			Transfer
0xaf545dbac28d6679259e4f24a1f6c6590fff5c08bdc7647dac026466fe4de	1E+07	2E+09	24/03/2022 3:08	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.31	336.629	0.00720523219074147f	782.416.163.592.617	3112.85			Atomic Match_
0x1a9c1e6980bdc04a7125b7b0314329db8373592553527d560e4ef4773b7f	1E+07	2E+09	24/03/2022 3:17	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0036889011338550049	400.577.796.353.198	3112.85			Cancel Order_
0x3d31f225689dd785c651b572d62f8b8d8ee7ab39927eb5e436b62f59bf3a	1E+07	2E+09	24/03/2022 3:17	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0036970470278f1652	400.778.219.681.656	3112.85			Cancel Order_
0x75dd3bb0afe7c0f94e4f2a0cd46b5286379a2ce4358571f4ba26c6079de30	1E+07	2E+09	24/03/2022 3:18	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0036994452882401	401.561.968.185	3112.85			Cancel Order_
0x500cc1b10f12bc681d8ee6bf66fdcee2594a28858c16f644a556289453e49	1E+07	2E+09	24/03/2022 3:18	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00369927303f1713772	401.704.058.513.799	3112.85			Cancel Order_
0x8b7529aa80746d2d4cedc2dfec67db337072e149c38b62fa9ee3fd3e4bb27f	1E+07	2E+09	24/03/2022 3:19	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0036295085529.380.228	394.085.529.380.228	3112.85			Cancel Order_
0xfba1aeb1aee22659f3b0d75360070aee082d4e506267e33c8b3f9edfc9618	1E+07	2E+09	24/03/2022 3:19	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00228877307131813f8	313.578.678.144.359	3112.85			Cancel Order_
0x4c1e83ba6042bec4cc237c3fb54746bed0af3397599411245fb858c88576	1E+07	2E+09	24/03/2022 3:20	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0031953887395618608	34.698.726.931.595	3112.85			Cancel Order_
0x097d300589fd4843ca2854be2257df0bcf1dc47a072a6a341040cca3f433	1E+07	2E+09	24/03/2022 3:20	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0031530799775965	342.634.895.476.721	3112.85			Cancel Order_
0xa9b3175d24a8f46074b054f7628bbbc6317659b28f9fe9b031c8b84ad60d8b	1E+07	2E+09	24/03/2022 3:20	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00315419055598372	342.513.699.028.927	3112.85			Cancel Order_
0xa93a98b1d8cc2d9d759877cae3f64373e306e84b2c952f752cae554b95	1E+07	2E+09	24/03/2022 3:20	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00315530799775965	342.634.895.476.721	3112.85			Cancel Order_
0xc5f5fca902c62ec8cf0b5d972edbf2f3f8d62e937af465e772683a30c1ae3f	1E+07	2E+09	24/03/2022 3:22	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00297507049422993	323.062.904.968.428	3112.85			Cancel Order_
0xbc7f8b40e56348fb866b75c8c67020b3e06c1d5d0d3759b2612842f7d906	1E+07	2E+09	24/03/2022 3:23	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00265715407032152	288.540.360.496.214	3112.85			Cancel Order_
0x2b9ac4d2b5f7b84575366122e588	1E+07	2E+09	24/03/2022 3:23	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x3ae264a373b70fbdabefc806069a92f75		0	0	0	0.00284959536366121	309.020.390.071.107	3112.85			Cancel Order_
0x6ba0926ef62688869a1171e6d40964f2d69e3f42ec5ecdb8bbca5cd75c01f	1E+07	2E+09	24/03/2022 3:24	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00240476392214868	261.133.314.306.126	3112.85			Cancel Order_
0x6232409c3cfede497b7a7caff420f97b7469ab98f31f50fa02748f3a747b8c8a	1E+07	2E+09	24/03/2022 3:24	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00268993344778078	292.099.873.094.515	3112.85			Cancel Order_
0x4a41757a1d627317c2e8e064314eada94a25cf8032e238ebd3d76723bcae	1E+07	2E+09	24/03/2022 3:26	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00250322428423668	271.825.125.025.261	3112.85			Cancel Order_
0x3db475925d5cf317c05de60037de3832056c67de337072e149c38b62f5843634c93c	1E+07	2E+09	24/03/2022 3:26	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00250270510586f0074	271.768.753.161.921	3112.85			Cancel Order_
0x63f76440ce1a98d20b34f19e9283eaea67084aba549a2864bf15aa374c20	1E+07	2E+09	24/03/2022 3:26	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.0025027051585f0374	271.768.753.161.921	3112.85			Cancel Order_
0x521306025c5ed189c6ef2b301bda72b45f16ea4d2f7fb44325c6240c8c187d	1E+07	2E+09	24/03/2022 3:26	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0	0	0.00250350729259f3052	271.864.916.928.795	3112.85			Cancel Order_
0x001199b71dfed7983bb17c143a200a9a98285e4dc116010f1dd8d3523eeca62	1E+07	2E+09	24/03/2022 3:39	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	3.48	3.778.932	0.001075746295410f87	116.815.290.218.666	3112.85			Deposit
0x7fa7f3d55f8625c25f9410d697cce384d6ffc33e286f276f7ada240	1E+07	2E+09	24/03/2022 4:49	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	0	0	0.00165225944092f354	179.455.226.902.392	3112.85			Withdraw
0x26c13a2ea2fa5705b7a8a89bd5b349abd3b3ea1a6220dfbcc9f8259f7548	1E+07	2E+09	24/03/2022 4:57	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x83c8f28c26bf6aaca652df1dbbe0e1b56f8baba2		0	1.088	11.814.592	0.02317704947299020	251.679.580.227.201	3112.85			0x9a2b8115
0x60cb979be7aa4d08a373e42b490f653eab4983203a7e085600c5bfe8f24	1E+07	2E+09	24/03/2022 5:00	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2		0	0	0	0.00101003937244249f6	109.680.175.453.531	3112.85			Withdraw
0xfa834f5a7ea59b13ba4fb06f7459b9b73de2e2e6b468784c2aea8840d94c	1E+07	2E+09	24/03/2022 5:10	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x00000000a50bb64b4bbeceb18715748dface08af		0	0.3	325.77	0.0056082652152972	609.001.519.729.123	3112.85			0xc0423cd6
0x94b6a6b48c2956b22a99ed2b177f0e8d042f6676f3ab1c895f2347d11b25eb	1E+07	2E+09	24/03/2022 5:23	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x00000000a50bb64b4bbeceb18715748dface08af		0	0.2	217.18	0.00436622399440608	474.128.524.711.506	3112.85			0xc0423cd6
0x5f49b4740bdcf89898203034b30f1bfb8d90d8c2c9ae91082ec2de75127bd89	1E+07	2E+09	24/03/2022 5:26	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	1	1085.9	0.00555296090923301	602.996.025.133.613	3112.85			Atomic Match_
0x7fc10f5ee5e55d537f0dd8f36baa26f5a0fb65752d33088bcd2140bb743f6	1E+07	2E+09	24/03/2022 5:29	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x7f268357a8c2552623316e2562d90e642bb538e5		0	0.95	1.031.605	0.006598149989f15968	716.493.107.383.257	3112.85			Atomic Match_
0x84fd716cbcdd2604c05d906bcb22e8cb4eacf055720f65a968f483ed10d6	1E+07	2E+09	24/03/2022 5:53	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0xc0423cd6d1e19d21f1f031895867e4ca36a14af3		0	0	0	0.0014511717121532	157.582.736.222.716	3112.85			Set Approval For All
0xe06c6fd1735ee80cfa7b09b94faf6ea63edaf38ac70bba26c611a575abc86	1E+07	2E+09	24/03/2022 6:04	0xc855d03edb308080e70f0fbc4e2f3be7c383782c	0x00000000a50bb64b4bbeceb18715748dface08af		0	0.15	162.885	0.00182155318776176	19.780.246.065.903	3112.85	Error(1)	Reverted	0xc0423cd6
				0xc02aaa39b223fe8d0a0e5c4f27ead9083c756cc2			0	3.3	3583.47	0.00131746757178186	143.063.803.620.259	3112.85			Deposit
				0x00000000a50bb64b4bbeceb18715748dface08af			0	0.0399	4.332.741	0.0064862339899087	704.340.147.995.799	3112.85	Error(1)	Reverted	0xbb00b6b6
				0x83c8f28c26bf6aaca652df1dbbe0e1b56f8baba2			0	0.0439	4.767.101	0.021167468378255793	22.985.753.911.948	3112.85			0x9a2b8115
				0x00000000a50bb64b4bbeceb18715748dface08af			0	0.045	488.655	0.0061391299535787895	666.648.121.659.321	3112.85	Error(1)	Reverted	0xbb00b6b6
				0x00000000a50bb64b4bbeceb18715748dface08af			0	0.0425	4.615.075	0.01419179025351948	154.108.650.362.903	3112.85	Error(1)	Reverted	0xbb00b6b6
				0x0000000035634b55f3d99b071b5a354f48e10bef			0	0.09	97.731	0.02531835514033745	274.932.018.468.924	3112.85			0xbb00b6b6

NFT-PLATFORMEN

NFT AANSCHAFFEN

Ethereum is required to buy an NFT.
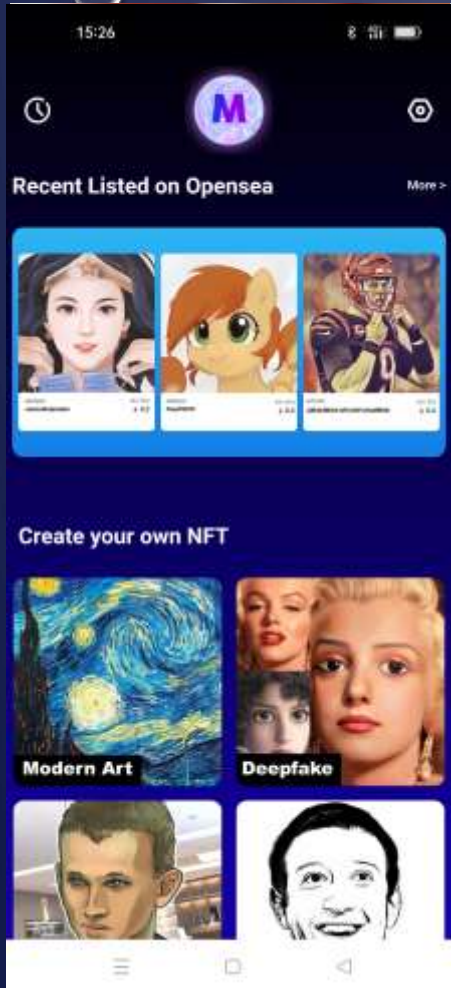
Create an account with Coinbase.com

→ Create an ETH address in Meta. Keep 12 keywords in a safe place.

Validate/Link your bank account.

Back to Coinbase.

Transfer Euros to Coinbase (to buy NFT and pay transaction fees.)

Transfer ETH to your Meta wallet.

Buy Ether(eum) on Coinbase.

Open Meta wallet and initiate connection with OpenSea.

Download and install Meta app.

Now you can buy an NFT on OpenSea.

Physical property:

NFT APPLICATIONS

NFT APPLICATIONS

Financial documents:

Bills, invoices, warranty cards, etc.

Identity verification:

For verifying identity or representing birth certificates, medical records, licenses, certificates, etc.

Tickets:

Concerts, parking garage, etc.

Fashion world:

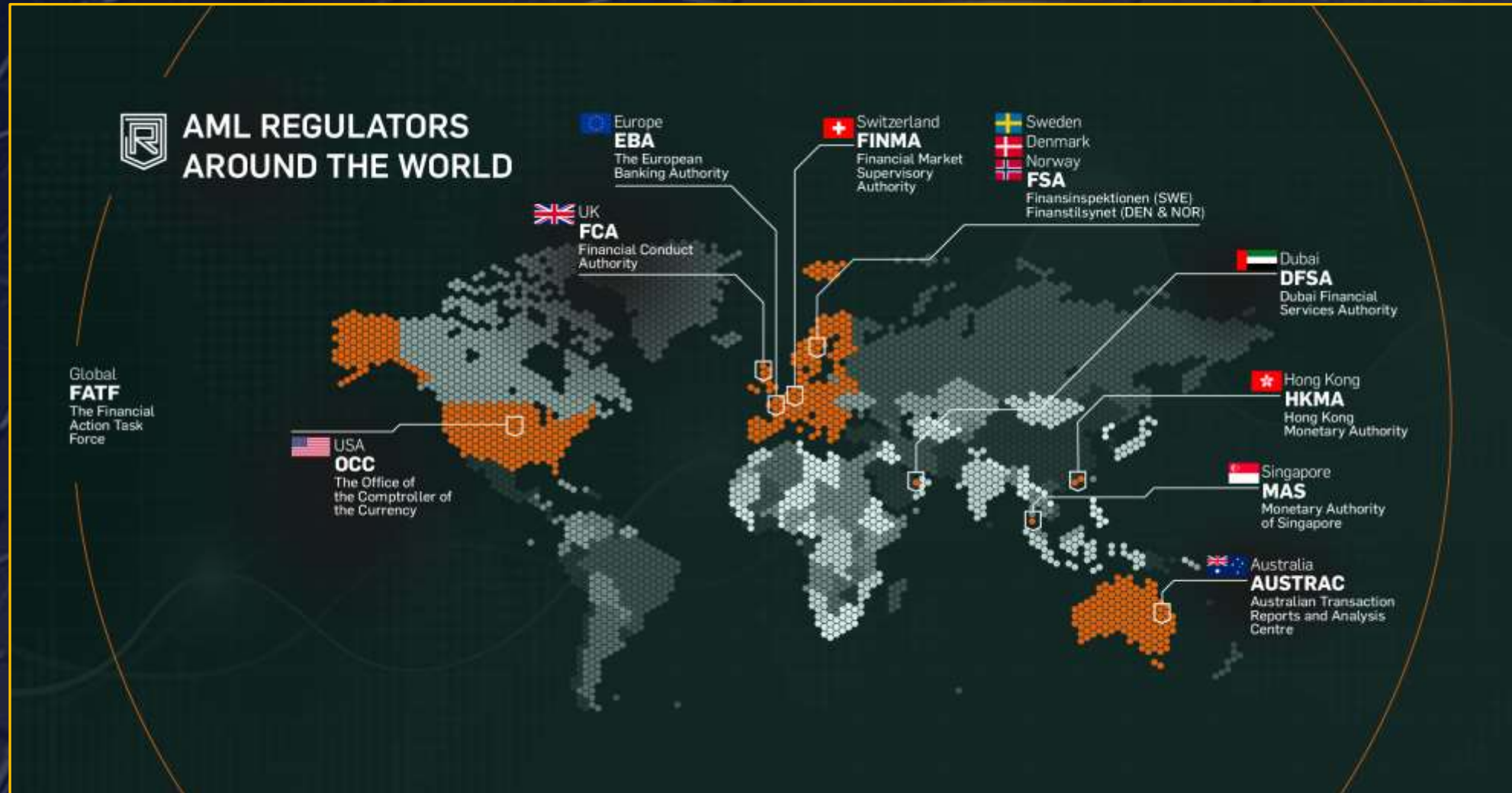Verify ownership of luxury items to reduce counterfeiting.

CRIMINAL ABUSE OF NFTS

OECD International Academy for Tax Crime Investigation

Conducting Financial Investigations

OECD

VULNERABILITIES

AML REGULATORS AROUND THE WORLD

NFTs are currently NOT bound by laws and regulations!

VULNERABILITIES

Many NFT platforms do not perform KYC/AML checks!

VULNERABILITIES

Shifting large amounts of money in a borderless, partly anonymous market!

VULNERABILITIES

The most expensive NFTs are exchanged between a small number of wallets!

Ability to add/create value to something trivial!

WASH TRADING

A wash trader would buy and sell their own NFT so that it will show inflated volume and interest and possibly a price increase. (The wash trader controls both the buy and sell prices so they can buy it at a higher price from themselves.) This behavior can be repeated over and over.

As a result, outsiders seeing this increased activity might consider buying the NFT at an inflated price. Once the NFT is sold to an outsider, the NFT creator pockets the difference.

NFT marketplace

1,530.11

0.40

0×828

0.45

0×084

Seller 1

Self-finance address buys NFT from Seller 1

NOTHING HAS CHANGED

Dirty/illicit money → **Convert into crypto** → **Buy a NFT (or create a NFT)** → **Artificially inflate prices by planted counterparty who buys at a higher price**

Convert into fiat money ← **Buy your own NFT back!** ← **Create an account WITH KYC and a verified bank account** ←

NO KYC
Valid FOREVER
Expires Never
Authorized by NOBODY

WHAT DOES A NFT TRANSACTION LOOK LIKE?

OpenSea
(NFT Marketplace)

5,5 ETH

104,5 ETH

0x8ad2...bb0c

1 BAYC

OpenSea
(NFT Marketplace)
Token contract

110 ETH

0x955c...c75c

1 BAYC

0xc859...d0c9

1 BAYC

0x3aa0...c001

109,9975 ETH

FTX
Exchange
Exchange
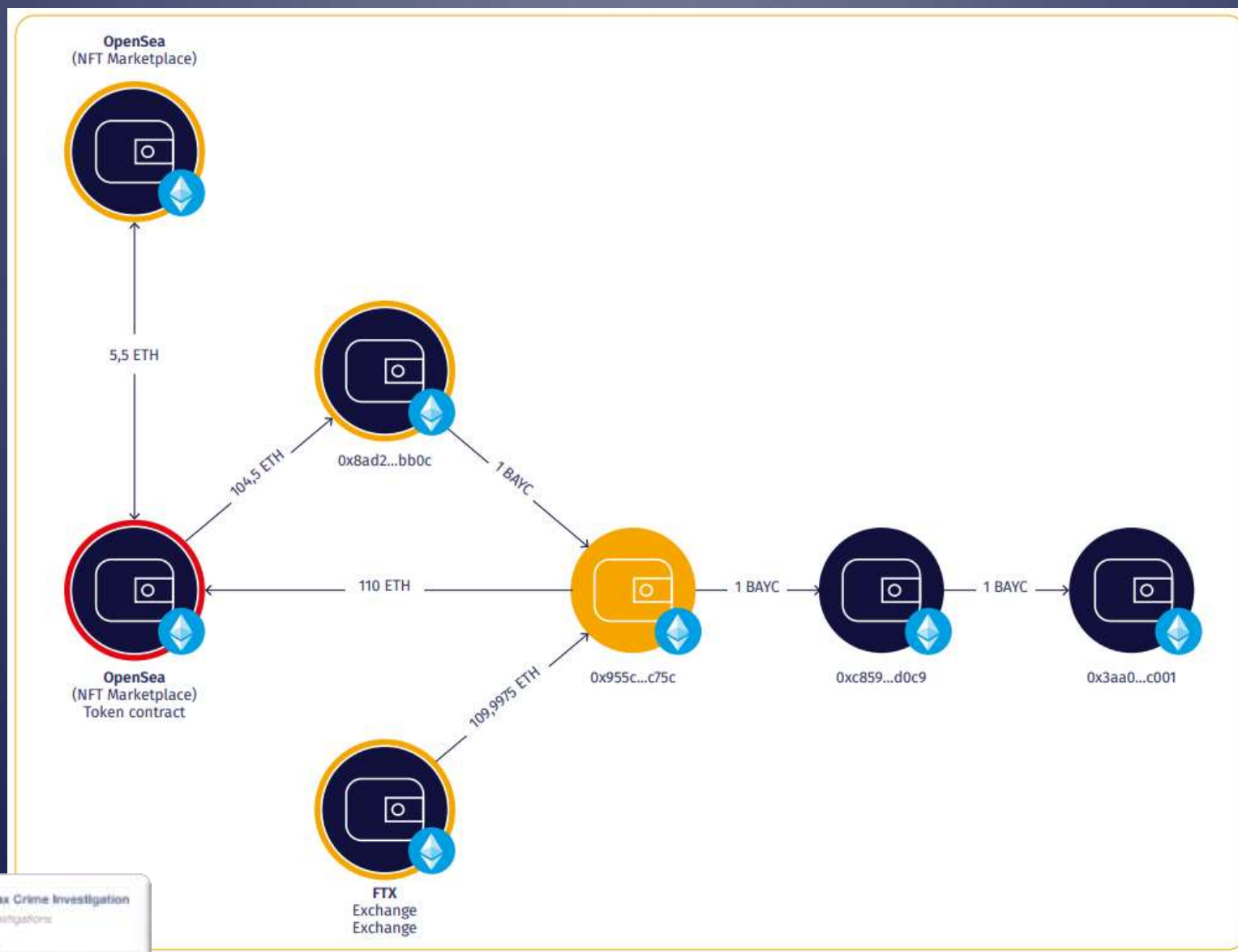
NFTS AND VAT CHALLENGES

1) WHAT ARE WE TALKING ABOUT?

DELIVERY OF GOODS

?

SERVICE

Where does the delivery take place?
In what country?

B2B vs B2C
Electronically supplied services?

Different VAT approaches in different
countries!
Possible 'double (non) taxation'!
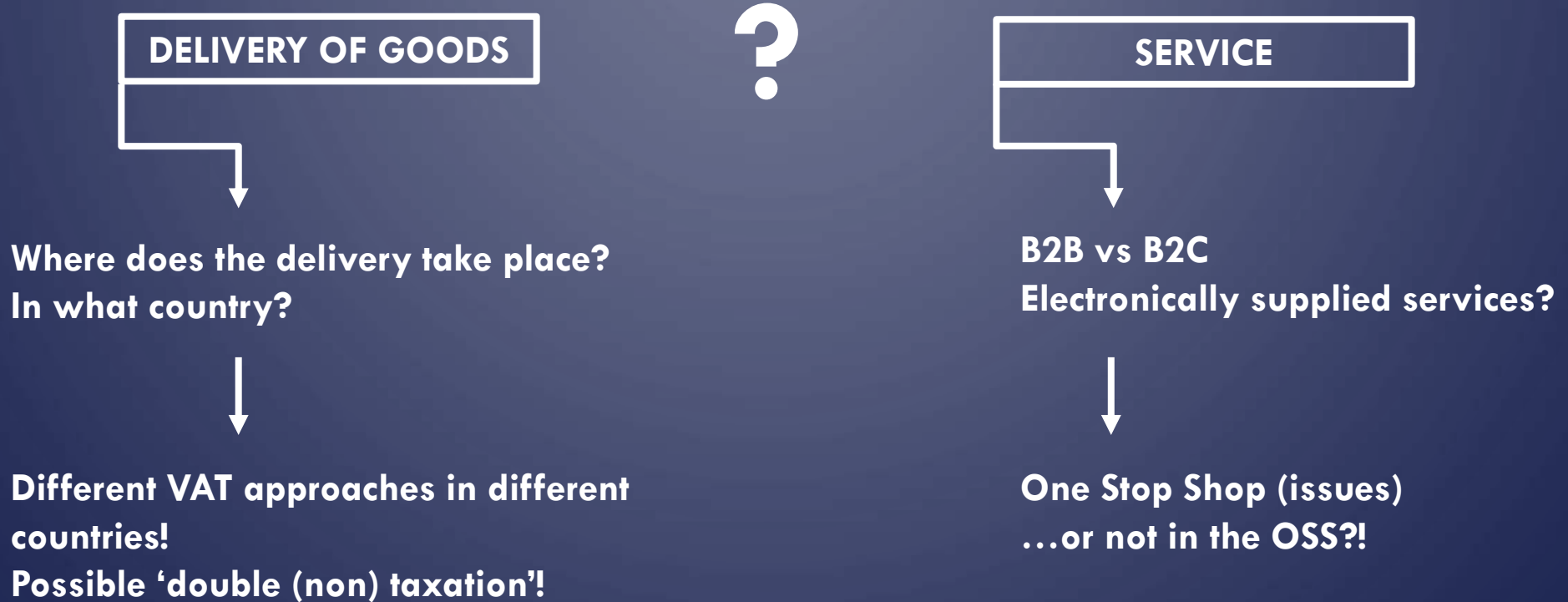
One Stop Shop (issues)
…or not in the OSS?!

1bis) WHAT ARE WE TALKING ABOUT?

A transfer of physical property/ownership?

- Full ownership?
- Partial ownership?

A license to use something (gaming)?

A license to access something (music)?

Different VAT treatement?! Different VAT rates?!

Royalties (music/artwork)?

Copyrights (music/artwork)?

What if the link between the NFT and the asset is broken?!

NFTS AND VAT CHALLENGES

2) TAXABLE AMOUNT?

- NFTs mostley sold by bidding.
- Ability to add/create value to something trivial!

Arm's length principle?
Fraud-prone?

3) VAT RATES?

A transfer of physical property/ownership?

A license to use something (gaming)?

A license to access something (music)?

Royalties (music/artwork)?

Copyrights (music/artwork)?

Different VAT rates in different countries?!

Danger of taxshopping!

ARE YOU
READY FOR IT
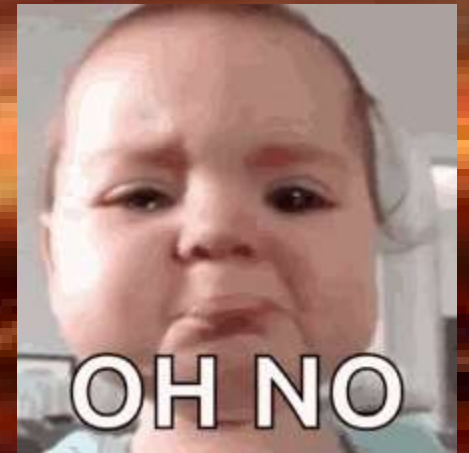
NFTS AND ENFORCEMENT CHALLENGES

NFT marketplaces/platforms:

- Important source of information
- 269 platforms, 2.460.000 wallets, 10.275.000.000 $, 231.000.000.000 $
- Even in colder prevailing market conditions, still high trading volume?!
- Where to go to? (USA, HK, ?, …)
- GDPR?
- Legal powers of tax administrations/law enforcement?

NFTs & follow the money:

- Payment methods (debit/credit card, Paypal, crypto's)
- Payment via cryptocards, the investigators nightmare?! (eg advcash.gi)
- Responsability/accountability of the platforms/marketplaces!?

Mission impossible?   No information, no taxation (investigation)!

METAVERSE

'**The Metaverse**' usually refers to a virtual world in which people can come into contact with each other online. It is a network of virtual 3D spaces in which users can perform all kinds of activities via an avatar, a digital doppelganger.
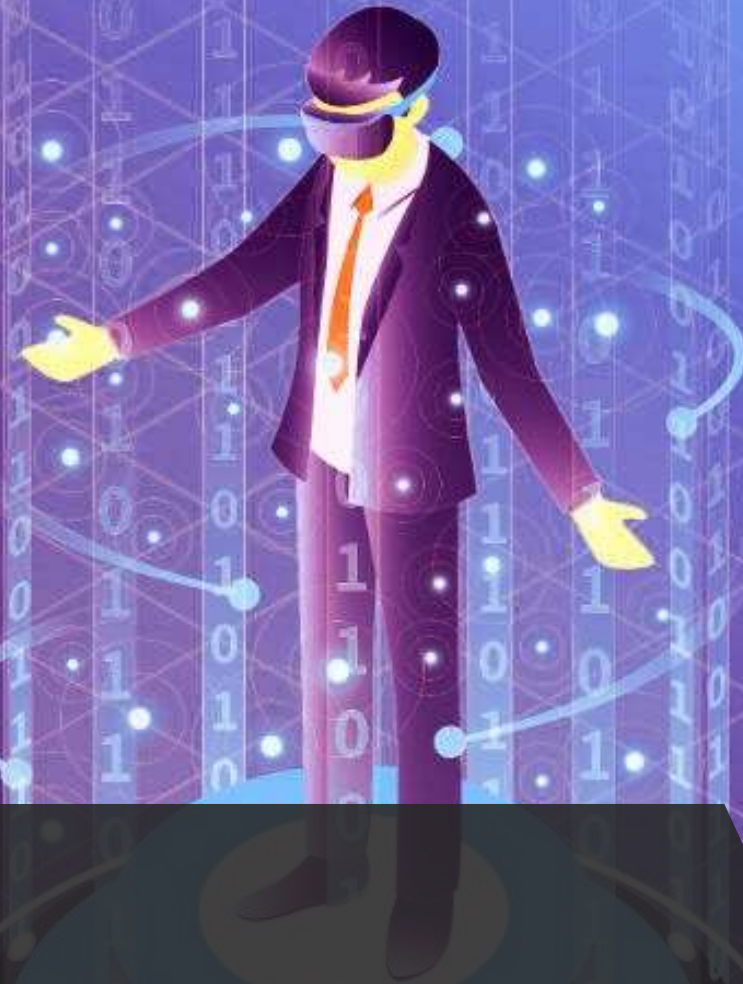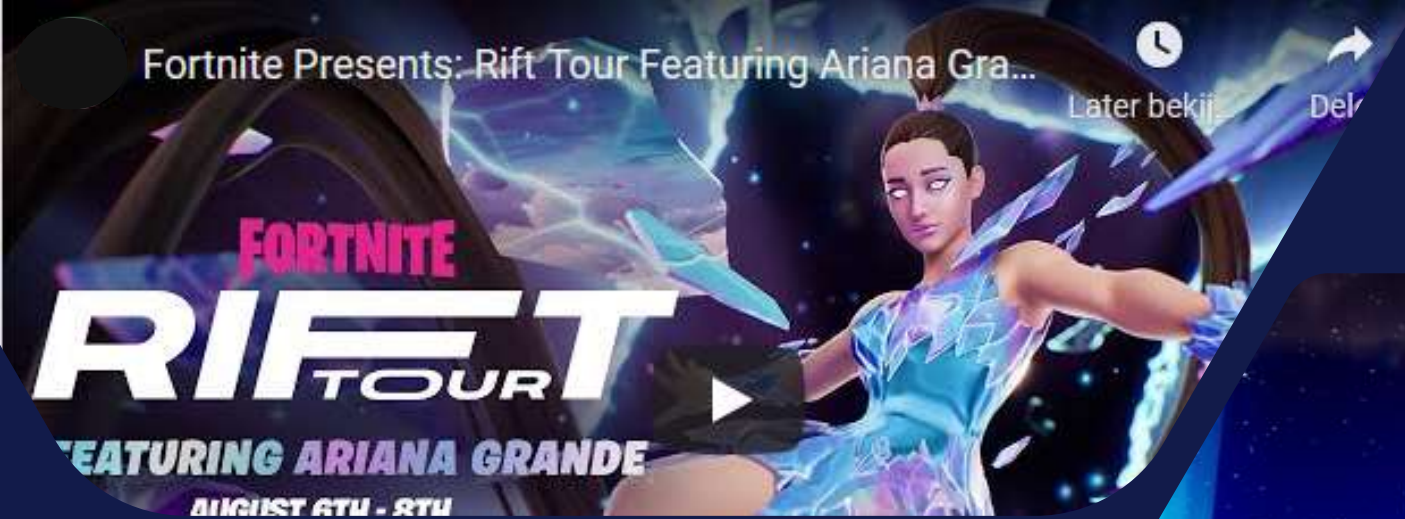
Which companies are active in the Metaverse?

The banks are also exploring the Metaverse: JP Morgan opens a lounge in Decentraland.

Ariana Grande gives a music concert in the Metaverse of the video game Fortnite!

27,7 million viewers

> 20 million USD revenues

Advertising and Marketing

In the context of advertising and marketing, the metaverse can be defined as an enduring, 3D and virtual space where users can spend their time and be targeted with branded content and sales promotion tactics. The closest analogy these days would be social media, where users log in, interact with their friends, family, and peer network — and in the course of these interactions, they come across brands, ads, sponsored content, and calls for conversion. Over time, social media has evolved with direct-to-customer stores where you can pay for products online and have them shipped to your address. Likewise, the metaverse may have 3D "stores" where you can not only watch ads, but also try out products and make purchasing decisions.

LAW ENFORCEMENT AND THE METAVERSE

ENLETS TIG event
15th - 17th February 2023
Athens, Greece

ENLETS Secretariat
Polish Platform for Homeland
Security (PPHS)
Slowackiego 17/11 Street
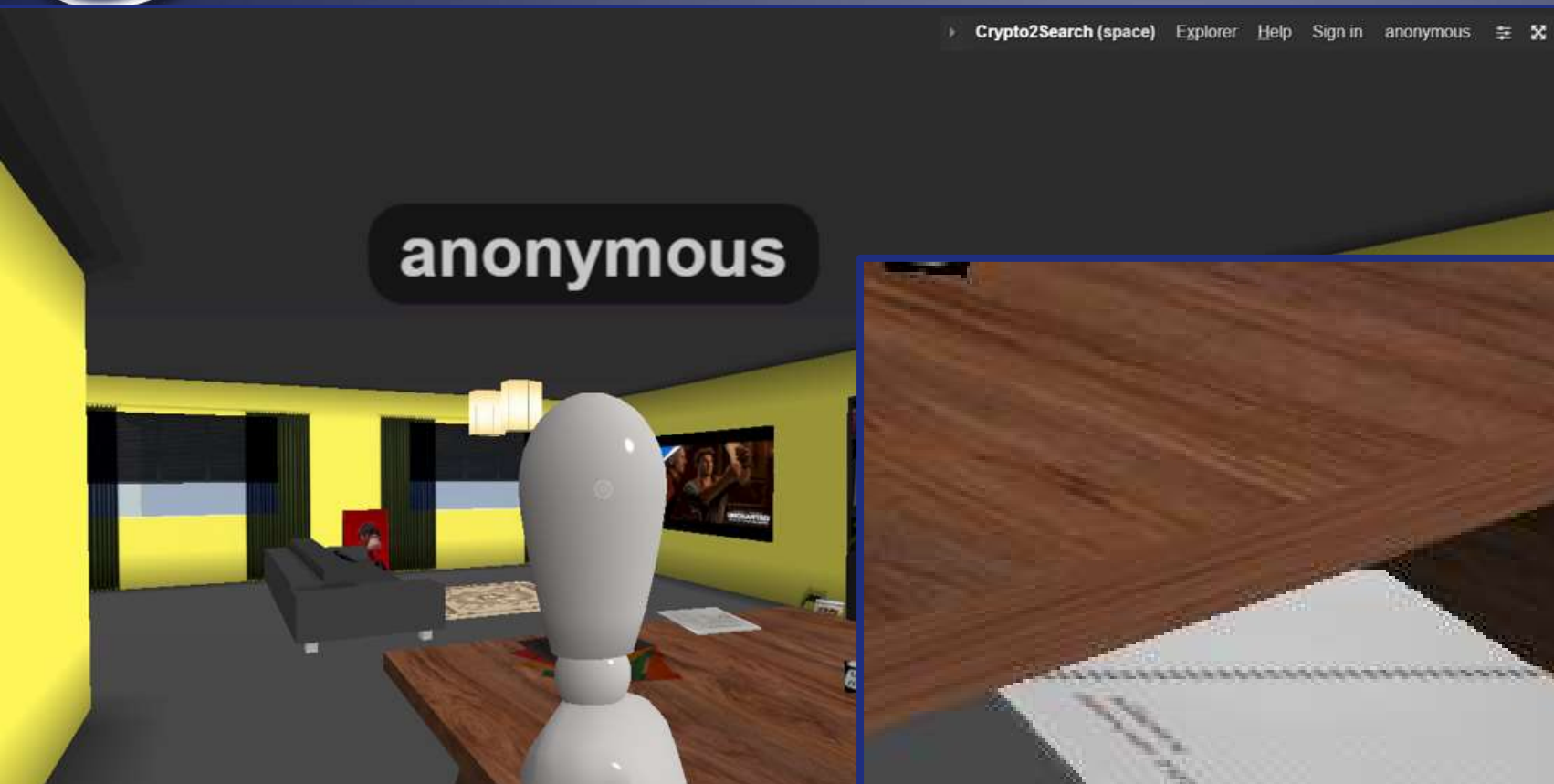60-822 Poznań | Poland

LAW ENFORCEMENT AND THE METAVERSE

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INNOVATION LAB

Thank You

OECD International Academy for Tax Crime Investigation

Conducting Financial Investigations

OECD